

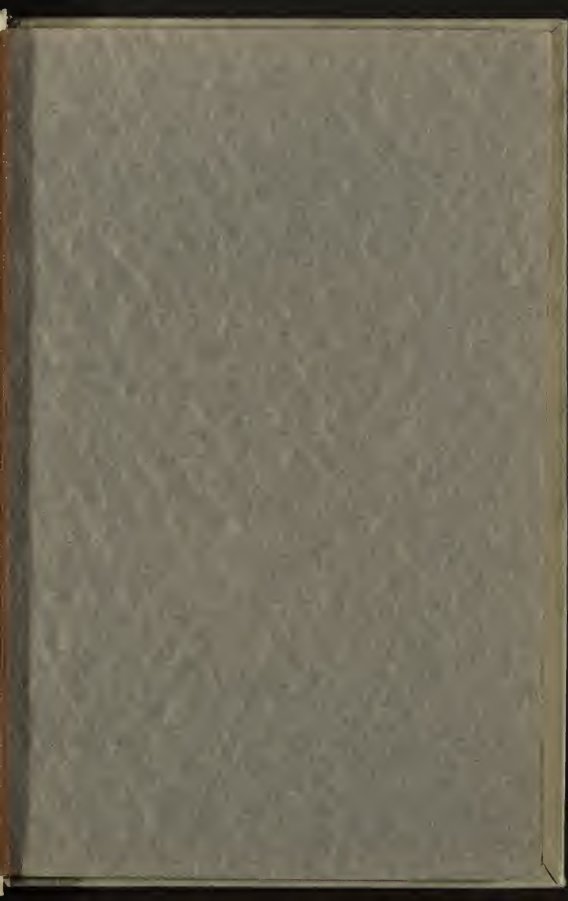
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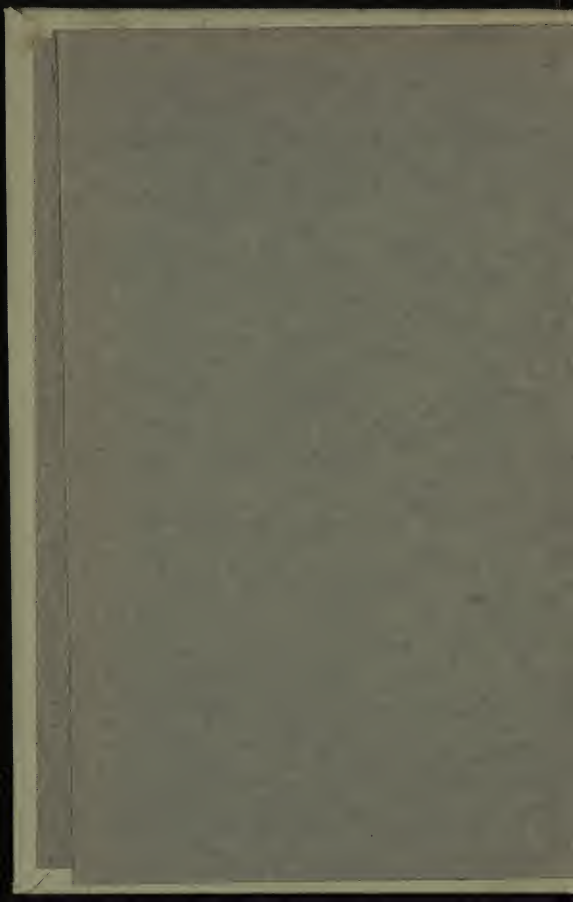
GUACANAGARI	PONTIAC	BLACK HAWK
MONTEZUMA	CAPTAIN PIPE	KEOKUK
GLATIMOTZIN	LOGAN	SACAGAWEA
POWHEATAN	CORNPLANTER	BENITO JUAREZ
POCAHONTAS	JOSEPH BRANT	MANGUS
SAMOSEY	RED JACKET	COLORADAS
MASSASOIT	LITTLE TURTLE	LITTLE CROW
KING PHILIP	TECUMSEH	SITTING BULL
UNCAS	OSCEOLA	CHIEF JOSEPH
TEDYUSKUNG	SEQUOYA	GERONIMO
	SHABONEE	

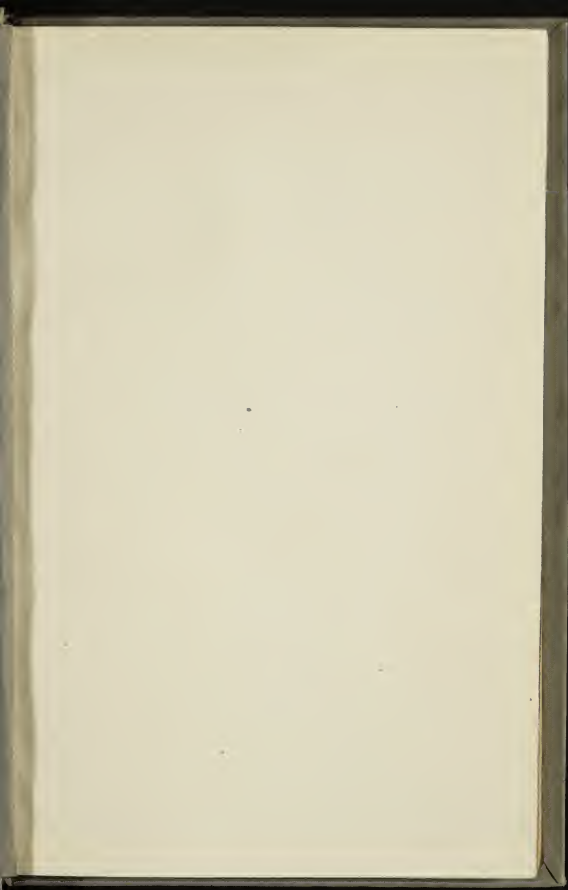


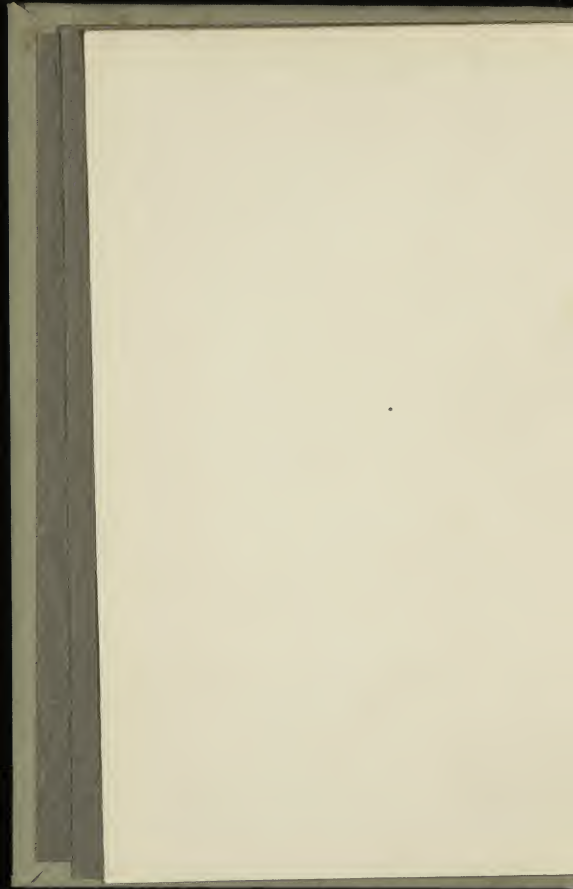
TO PERPETUATE THE HISTORY
AND DEVELOPMENT OF THE
PEOPLE REPRESENTED BY THE
ABOVE CHIEFS AND WISE MEN
THIS COLLECTION HAS BEEN
GATHERED BY THEIR FRIEND
EDWARD EVERETT AYER

AND PRESENTED BY HIM
TO
THE NEWBERRY LIBRARY
1911









THE
CARLISLE INDIAN SCHOOL
CATALOGUE & SYNOPSIS OF COURSES



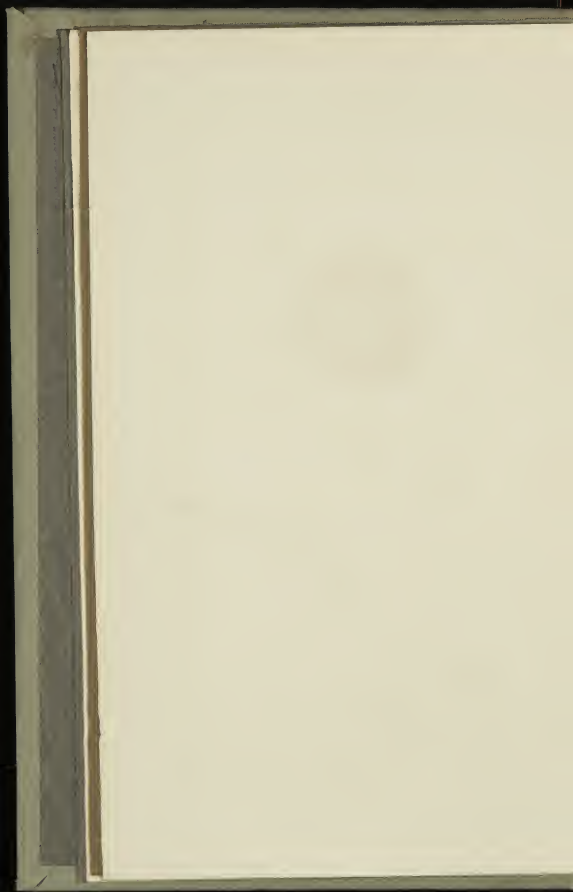
Education for Efficiency



EDUCATION for efficiency is my subject. By efficiency I mean effective power for work and service during a healthy and active life. This effective power every individual man or woman should desire and strive to become possessed of; and to the training and development of this power the education of each and every person should be directed. The efficient nation will be the nation made up, by aggregation, of individuals possessing this effective power; and national education will be effective in proportion as it secures in the masses the development of this power and its application in infinitely various forms to the national industries and the national service.

DR. CHARLES W. ELIOT,
President of Harvard University, Emeritus.





Catalogue and Synopsis
of Courses

United States Indian
School

Carlisle, Pennsylvania



1915

SECOND EDITION

Printed by Students
THE CARLISLE INDIAN PRESS

Ayer
389
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1915

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THE old general rule was that educated people did not perform manual labor. They managed to eat their bread, leaving the toil of producing it to the uneducated. This was not an insupportable evil to the working bees, so long as the class of drones remained very small. But now, especially in these free States, nearly all are educated—quite too nearly all—to have the labor of the uneducated in any wise adequate to the support of the whole. It follows from this that henceforth educated people must labor. Otherwise, education itself would become a positive and intolerable evil. No country can sustain in idleness more than a small percentage of its numbers. The great majority must labor at something productive. From these premises the problem springs, "How can labor and education be combined?"

Free labor argues that as the Author of man makes every individual with one head and one pair of hands, it was probably intended that heads and hands should cooperate as friends, and that that particular head should direct and control that pair of hands. As each man has one mouth to be fed, and one pair of hands to furnish food, it was probably intended that that particular pair of hands should feed that particular mouth—that each head is the natural guardian, director, and protector of the hands and mouth inseparably connected with it; and that being so, every head should be cultivated and improved by whatever will add to its capacity for performing its charge. In one word, free labor insists on universal education.

ABRAHAM LINCOLN.



HIS booklet was done into printed form by Indian student apprentices in the print shop of the Carlisle Indian School as a part of their regular training.

The initials, head-pieces, tail-pieces, borders, and imprints were designed by students of the Native Indian Art Classes under the direction of their teachers, Mr. William H. Dietz (Lone Star) and Mrs. Angel Decora-Dietz. They illustrate the practical adaptation of Indian Art to handicraft decoration.



Faculty and Officers

Administrative Officers.

OSCAR H. LIPPS	Superintendent
JOHN D. DEHUFF	Assistant Superintendent
HARVEY K. MEYER	Secretary
	Director of Mechanic Arts
MATILDA G. EWING	Director of Home Economics
NELLIE R. DENNY	Manager of Outing System
WALTER RENDTORFF	Physician and Health Officer
CLAUDE V. PEEL	Chief Clerk
WILL H. MILLER	Financial Clerk
SARA A. RICE	Stenographer
LOTTIE GEORGENSON	Clerk
JAMES E. KIRK	Storekeeper
OVERTON L. BURNEY	Assistant Storekeeper

Commandants and Matrons.

FRANK A. GEHRINGER	Commandant
JACOB DURAN	Assistant Commandant
WALLACE DENNY	Assistant Commandant
MATILDA G. EWING	Head Matron
ORA L. KNIGHT	Assistant Matron
MARY R. AUSTIN	Assistant Matron
EMMA A. GEHRINGER	Matron Large Boys' Quarters
FRANCES J. BOYD	Matron Small Boys' Quarters
SUSAN ZEAMER	Diningroom Matron

Teachers and Instructors.

ACADEMIC.

JOHN D. DEHUFF	Principal
	Teacher of Agriculture
EMMA H. FOSTER	Teacher
HATTIE M. McDOWELL	Teacher
ADELAIDE B. REICHEL	Teacher
REY F. HEAGY	Teacher
MARGARET ROBERTS	Teacher
CLARA SNODDY	Teacher

ACADEMIC—CONTINUED.

CLARA R. DONALDSON ..	Teacher
.....	Teacher
ELIZABETH G. BENDER ..	Teacher
MARGARET M. SWEENEY ..	Teacher
SALLIE E. HAGAN.....	Teacher
GWEN WILLIAMS ..	Teacher
IDILLA M. WILSON ..	Teacher
ANGEL DECORA-DIETZ ..	Teacher of Native Indian Arts
VERNA L. DUNAGAN ..	Music Teacher
GEORGE F. TYRRELL ..	Band Teacher
BESSIE B. BEACH ..	Librarian

AGRICULTURE.

WILLIAM B. GRAY..	Director of Farming
CARSON H. CARLTON ..	Assistant in Farming
ZEPHANIAS SIMONS ..	Instructor in Dairying
GEORGE ABRAMS ..	Instructor in Greenhouse Work

MECHANIC ARTS.

.....	Director
ARTHUR G. BROWN ..	Instructor in Printing
JAMES HOLY EAGLE ..	Assistant in Printing
JOHN B. MCGILLIS ..	Clerk in Printing Office
HARRY F. WEBER ..	Instructor in Engineering & Plumbing
JOHN A. HERR ..	Instructor in Carpentry
WILLIAM C. SHAMBAUGH ..	Instructor in Blacksmithing
HARRY B. LAMASON ..	Instructor in Masonry
CHARLES H. CARNS ..	Instructor in Painting
WILLIAM H. DIETZ ..	Instructor in Mechanical Drawing
WILLIAM NONNAST ..	Instructor in Tailoring
JOHN BOLTZ ..	Instructor in Shoemaking

HOME ECONOMICS.

MATILDA G. EWING ..	Director
KATHERINE L. KECK ..	Teacher of Domestic Science
BERTHA CANFIELD ..	Teacher of Domestic Art
MARY YOOS ..	Teacher of Dressmaking

HOME ECONOMICS—CONTINUED.

ELIZABETH SEARIGHT	<i>Teacher of Plain Sewing</i>
ELLA ALBERT	<i>Instructor in Laundering</i>
IDA BOGER	<i>Assistant in Laundry</i>
MARY F. GUNDERSON	<i>Instructor in Cooking</i>
RAYMOND RENEKER	<i>Instructor in Baking</i>

OUTING SYSTEM.

NELLIE R. DENNY	<i>Manager</i>
LEO F. ROCQUE	<i>Clerk</i>
DAVID H. DICKEY	<i>Boys' Field Agent</i>
LIDA M. JOHNSTON	<i>Girls' Field Agent</i>

HOSPITAL.

WALTER RENDTORFF	<i>Physician in Charge</i>
LAVINIA CORNELIUS	<i>Head Nurse</i>

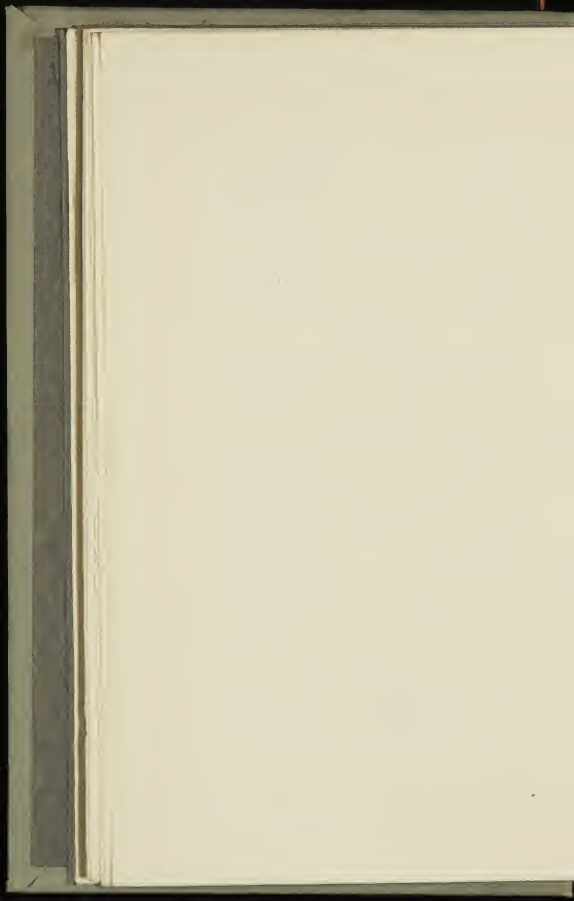
PHYSICAL CULTURE.

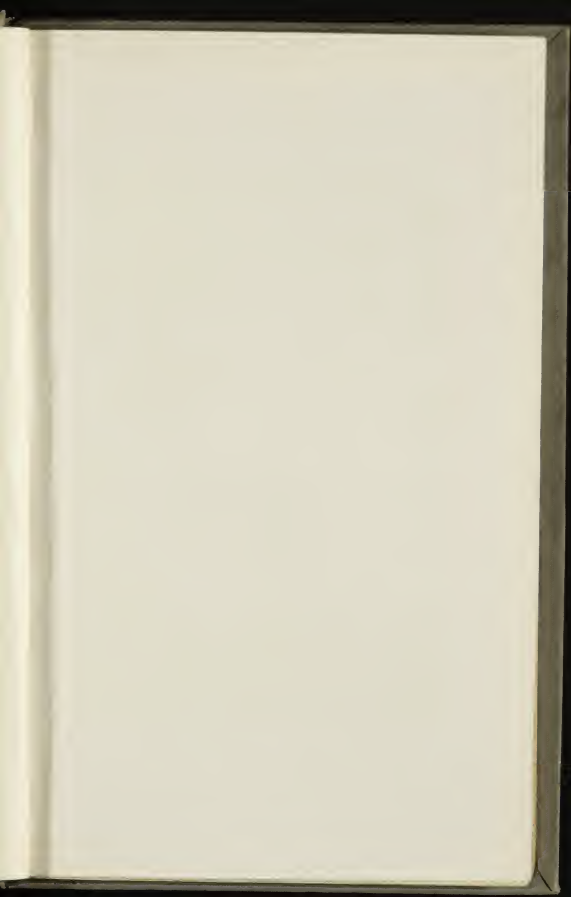
MERTON L. CLEVETT	<i>Physical Director</i>
.....	<i>Assistant</i>

MISCELLANEOUS EMPLOYEES.

GEORGE FOULK	<i>Teamster</i>
EDWARD CORBETT	<i>Nightwatchman</i>
JACOB SHEARER	<i>Nightwatchman</i>
GEORGE L. GOTTWERTH	<i>Fireman</i>
JOHN ALBRIGHT	<i>Fireman</i>









GENERAL R. H. PRATT
Founder of the Carlisle Indian School



Location.



THE Carlisle Indian School is situated in the heart of the great Pennsylvania agricultural belt, on the edge of the town of Carlisle, in the beautiful Cumberland Valley, about nineteen miles from Harrisburg, the capital of Pennsylvania, one hundred twenty miles from Philadelphia, and one hundred forty-five miles from Washington, D. C. The climate is very healthful, there being neither great extremes of cold nor of heat.

History.

For years there had been a cavalry barracks located on the present site of the school. In the early history of the Colonies, this had been a frontier military post, and it was here that, in 1775, Benjamin Franklin made a treaty of peace with the Indian tribes of Pennsylvania.

During the Revolutionary War a number of Hessian prisoners were brought to Carlisle, following the battle of Trenton, and incarcerated under military surveillance. While held as prisoners, they erected a large, stone guardhouse, of unique construction, which is still standing at the south entrance to the grounds. It is one of the most historic buildings in this part of the State.

In July, 1863, when the Southern army invaded Northern territory, and hostilities culminated in the battle of Gettysburg, Carlisle was shelled and the buildings of the post were burned. These were rebuilt in 1865.

In 1875, Lieutenant R. H. Pratt, now a retired Brigadier General of the United States Army, was detailed by the War Department to take seventy-two Indian prisoners from Fort Sill, Indian Territory, to St. Augustine, Florida, where they were placed in confinement in the old Spanish Fort, San Marco, built in the sixteenth and seventeenth centuries. The Indians were taken in chains, and General Pratt remained in charge of them. Feeling that they were secure in the old fort, and that the great distance

from their homes convinced them of the impossibility of escape, he soon removed their irons and found work for them. Benevolent ladies, some of them skilled school teachers, undertook their education, and the younger men and a number of the older ones were under scholastic instruction in the casements of the old fort, fitted up crudely as school-rooms. Here they learned to speak English and many of them to write creditable letters.

In 1878, these prisoners were released and all who desired were returned to their homes. Twenty-two of the younger men expressed a desire to remain in the East and go to school. They were permitted to do so and General Pratt was detailed to take them to Hampton Institute, Virginia, where arrangements were made to admit them to that institution then under the management of General Armstrong, and to remain there with them. The following year the Carlisle Indian School was founded by General Pratt. As to how Carlisle came to be selected as the place at which to establish this great "example Indian school," General Pratt has stated fully in an article published in *THE RED MAN* for June, 1914, under the caption "Indians Chained and Unchained," from which the following extracts are taken:

Experience had shown that Indians, if properly handled, could easily and quickly be merged and assimilated in their interests with our white population, from whom they could best get the higher and better ideas of life they all needed to become useful citizens. These views led to warm discussion between General Armstrong and me, until I finally declared I could not conscientiously remain on duty at Hampton, but was willing, if held to duty in Indian education, to undertake a school especially for Indians and there work out my own ideas.

I went to Washington and suggested to Mr. Schurz (then Secretary of the Interior), that Carlisle Barracks, then unoccupied, located in the rich Cumberland Valley in Pennsylvania, whose industrious people would be an example for the pupils, might be utilized for such a school.

Secretary Schurz quickly said, "If Secretary McCrary will give us Carlisle Barracks, we will put an Indian School there under your charge." Secretary McCrary agreed to turn over Carlisle Barracks if there were no legal objections, and if there were legal objections he would ask Congress to remove them.

It was found that public property could not pass to other departments without congressional action, and the Secretary had a bill drawn to transfer Carlisle Barracks to the Interior Department for an Indian School. Duplicate copies were made, and Governor Pound, a member of the House from Wisconsin, and Governor Pendleton, a member of the Senate from Ohio, introduced the bill in the House and Senate. The bills were re-

ferred to the Indian Committees of the two branches of Congress, and Governor Pound was appointed by the House Committee to report to the Committee on the feasibility of it. A report was written, and then the bill, with a favorable recommendation from the Committee, was returned to the House and placed on the calendar.

I was then instructed by the Secretary of War and the Secretary of the Interior how to "lobby" for its passage. The Secretaries sent me daily to explain to members of the House and Senate, and kept me in Washington several months. It was then found that the bill was so far down on the calendar it could not be reached that session. Secretary McCrary then invented a way to go ahead and establish the school. He said:

"We have the bill before Congress with a favorable report from the committee, and I will submit it to General Hancock, who commands the Department in which Carlisle Barracks is located, and if in his judgment Carlisle can be spared, I will then ask General Sherman's opinion, and, if he thinks well of it, we will turn Carlisle over for an Indian School, pending the action of Congress on the bill"

General Hancock endorsed, "Carlisle Barracks will never again be required for military purposes, and I know of no better place for such an experiment." General Sherman endorsed with his own hand, "approved, providing both Indian boys and girls are educated at said school."

The Secretary then issued the order, and in September, 1879, Carlisle Barracks was tentatively given to the Interior Department for an Indian School, awaiting the favorable action of Congress, and I was detailed under the law in the Army bill.

The barracks had been abandoned as a station for troops for seven years and held under the care of an army officer with a sergeant and a few men to protect the buildings. The Indian Bureau instructed me to proceed to Rosebud and Pine Ridge, Sioux Agencies in Dakota, and gather seventy-two boys and girls, thirty-six from each, and to bring from tribes in the Indian Territory enough more to make one hundred and twenty. Hampton loaned most of the former Florida prisoners to assist in the beginning. Repairs to the barracks were immediately started, and I went to Rosebud and Pine Ridge Agencies for pupils. Eighty-four boys and girls—twelve more than the number authorized—were secured from these two Agencies and brought to Carlisle. Among them were five children of Spotted Tail and many of the others were children of the most noted chiefs at those Agencies. We reached Carlisle, October 6, 1879.

Before starting to Dakota I had sent Etahdleuh, one of the Florida prisoners, to the Kiowa and Comanche Agency after pupils, and Making Medicine to the Cheyenne and Arapahoe Agency. These two, with the help of Agents Miles and Ilaworth, made up good parties in which I was much gratified to find a number of the children of my Florida prisoners, which proved their confidence in their former jailor.

Mr. A. J. Standing, whom I had known as a successful teacher among the Indians at the Wichita and Fort Sill Agencies, was engaged to assist at the school. He was then in Kansas, and secured a party from the Pawnees. The children from these tribes enabled the school to open

November 1, 1879, with 147 pupils, twenty-seven more than was authorized. The expenses of the school were paid the first three years from what was called the "Civilization Fund," which was several hundred thousand dollars accumulated for the purpose of general Indian civilization from the sale of Osage Indian lands in Kansas. The success of the school led the Interior Department to help it to grow, and after three years Congress had confidence and passed the bill permanently to use Carlisle Barracks, and then began to appropriate for its support. Congressional favor continued its growth, until at the age of twenty years it numbered an average yearly attendance of over a thousand pupils from more than eighty tribes.

The school is still supported by the Federal Government, and it has been specifically provided for by Congress since 1883.

Aim.

It is the aim of Carlisle to train the Indian youth of both sexes to take upon themselves the duties and responsibilities of citizenship. Indian young men and young women are given thorough academic and vocational training, which prepares them to earn a living, either among their own people or away from the reservation in competition with whites. It is primarily a vocational school for both sexes.

Buildings and Plant.

The school plant consists of 50 separate buildings and 311 acres of excellent farming land. There are two farms. The Parker Farm is located on the north side of the campus, immediately adjacent to it, and contains 110 acres. On this farm is located the dairy and piggery. The Kutz Farm is about one-half mile distant and contains 175 acres of valuable farming land. The school campus comprises an area of 26 acres. The buildings are of simple exterior and have been carefully arranged for the immediate purposes of the several departments of instruction.

The Academic Building is very well ventilated and lighted, and equipped throughout with modern apparatus and supplies. The Auditorium, with a seating capacity of one thousand and a stage fifty feet deep, is located in this building. The Library, which contains about 3,500 carefully selected volumes and other literature for reference purposes, also occupies a portion of the first floor of the Academic Building.

The boys' industries are taken care of in the large U-shaped Mechanic Arts Building, which, since it has been remodeled, is



ENTRANCE GATES—CARLISLE INDIAN SCHOOL



A ELAC SAUITE CARLISLE INDIAN SCHOOL

one of the most complete buildings in the country for instruction in the trades.

The Gymnasium, which was built in 1887, partly from funds donated by the students, is one of the best in the State. It is thoroughly equipped with all kinds of apparatus for giving physical instruction. A three-story addition was built to this building in 1895, and it provides meeting halls for the Young Men's Christian Association and the boys' literary societies; also, bath-rooms and trophy room.

The girls' industries are provided for in buildings especially erected and equipped for the purpose.

The dormitories for the boys and for the girls are provided in three large buildings—the two Boys' Quarters and the Girls' Quarters. These buildings have ample porch room on each floor and are equipped with assembly halls, reading rooms, and society rooms. There are no large dormitory rooms, individual rooms to accommodate from two to three students being provided throughout.

The school is equipped with a magnificent athletic field, known as Indian Field, which is thoroughly provided with all facilities for carrying on athletic sports. At one end of the field is a large building, called the Cage, which offers facilities and abundant space for indoor football, baseball, lacrosse, and track sports.

The Hospital, which was built in 1907, is a modern brick structure, carefully planned, situated in a beautiful spot, and lacks nothing in accommodations and equipment.

The Printery is a new building, especially erected in 1908. It is a beautiful structure, built of cream-colored brick, one and one-half stories in height.

There are many other buildings, such as the Administration Building, Alumni Hall, cottages for members of the faculty, Teachers' Quarters, warehouses, the greenhouse, a well-built and thoroughly-equipped Power House, a Model Home Cottage for giving practical instruction in home-making, etc.

Through the generosity of Miss Mary Ropes, of Massachusetts, there was erected in 1909 a beautiful Front Entrance of colonial design. This entrance is divided into four columns, built of tapestry brick, with stone trimmings. The two central columns are illuminated on the two opposite sides by beautiful wrought-iron lamps, which light the entrance at night.

Courses.

In addition to the usual grade and pre-vocational courses, the following advanced vocational courses are offered:

- I. Course in Agriculture.
- II. Course in Mechanic Arts.
- III. Course in Home Economics.
- IV. Course in Hospital Nursing.

The courses in Agriculture, Mechanic Arts, and Home Economics are three-year secondary courses, and the course in Hospital Nursing is a one-year preparatory course.

A detailed description of these courses is given in the Synopsis of Courses forming the second part of this publication.

Requirements for Admission.

No students are now admitted at Carlisle who have not at least completed the third grade. In all cases applicants for enrollment must pass a satisfactory physical examination and must furnish satisfactory evidence as to their moral character, deportment, and worthiness. Owing to the great distance of Carlisle from the Indian country and the consequent great cost of transporting pupils to the school, the only students who should be recommended for enrollment are those whose past records and efforts have demonstrated their desire and capacity for further education, and their worthiness to be given additional opportunities at Government expense. Applicants to be admitted must be between the ages of 14 and 21 years and must prove the possession of at least one-fourth Indian blood. Preference will be given to full bloods and to those approximating full blood. No students will be enrolled who have previously attended a Government Indian School and who have not completed the course at such school, except in very special cases and for good reasons.

Indian young men and young women who have completed the eighth grade, and are at least 14 years of age and otherwise eligible for enrollment as students in a United States Indian School, may be admitted to the courses in Agriculture, Mechanic Arts, and Home Economics without examination. Students who have not completed the eighth grade may be admitted upon passing a satisfactory examination in reading, writing, spelling, arithmetic,

geography, United States history, and physiology. Maturity of age and practical experience will be duly considered in determining the student's qualifications for admission. Full credit will be given for any high-school work or systematic vocational practice work that may have been done.

The Carlisle School desires to enroll only young men and young women who have a definite purpose in view, who really "mean business," and who desire to obtain thorough training and education. The opportunities at Carlisle are manifold, and, in view of its increased facilities for vocational training, the requirements of admission have naturally been raised.

General Information.

Board and clothing are furnished the students during their period of attendance at school.

The school has a partial military organization, and all students are expected to abide faithfully by the regulations which are in force for their guidance and protection.

Students attend the academic department one-half day and pursue their trades or industries the other half day.

There is absolute freedom of religious belief, but all students are required to attend Church and Sunday School at their respective churches in the town of Carlisle. Provision is also made during the week for one hour's denominational instruction for all students, and at these meetings the pastors and the priest are in charge of the various groups.

There are maintained by the students a Young Men's Christian Association and a Young Women's Christian Association, each of which exercises a very great influence for good on the student body.

The young women have two literary societies, the Mercer Literary Society and the Susan Longstreth Literary Society, both of which hold meetings each week in their society rooms. The young men have two societies, called the Standard Literary Society and the Invincible Debating Society. These societies meet weekly for special programs and deliberation. All of the societies have constitutions, elect their own officers, and conduct their meetings, subject only to the supervision of certain advisory members from the faculty.

The students publish a weekly newspaper, called THE CAR-

LISLE ARROW, which is edited and printed by themselves. In addition, there is published by the school THE RED MAN, an illustrated monthly magazine which is also printed by the students.

School Government.

Boys.—The government of the school is military only so far as is necessary and is beneficial for discipline and character-building. The body of the military organization consists of seven troops of dismounted cavalry and a band of forty members. The troops are officered by cadets, who are usually promoted through the grade of non-commissioned officers to second or first lieutenant, and later to captain.

Drills of the squadrons and regiment are occasionally held, but the greater number of drills are in troop formations, with cadet officers in command, the Commandant of Cadets (or other staff officer) being present to supervise the work in the field, helping both the officers and the troops.

The national blue uniform, with the cavalry yellow stripes, chevrons, shoulder straps, trimmings, etc., makes a very pretty effect.

The regiment as an organization has been present at several Presidential inaugurations; it marched in the parade dedicating the new capitol of Pennsylvania, the inauguration of Pennsylvania's Governor, and other military parades in the East. Wherever seen, the regiment has received flattering comments, even from the Presidents themselves.

The promotions from ranks are an incentive to the ambitious cadets to put forth efforts to outstrip their fellows. The responsibilities, together with the close supervision given cadet officers, offer an opportunity for them to become skillful not only in the handling of a military body, but in handling men wherever large numbers must be cared for.

Girls.—One of the most pleasant features of a girl's life at Carlisle is the homelike manner in which she lives. Rooms for two or three girls are considered more sanitary, as well as more cheerful and homelike, than large dormitories.

Girls are required to make their own beds and to keep their own rooms in order. An orderly for each room is appointed by the matrons. It is the duty of this orderly to see that the

rooms are swept, aired, and dusted each morning, and that the washbowl, pitcher, washstand, etc., are always in good order. These orderlies are changed each month to give all the girls practice in this work. Each room is given a thorough cleaning every Saturday morning. The girls take great pride in caring for their rooms, each striving to outdo the others in neatness and general appearance.

Girls' Quarters is a three-story structure. The younger girls are on the first floor and are in charge of older girls. This supervision is splendid training for the older girls, especially for those who expect to take up matron's work after leaving school. It is invaluable also in training girls for work in their own homes. Here girls learn from actual experience the care that is necessary regarding the bathing of children, the care of their teeth, the necessity of regularity in sleeping, eating, exercise, etc., and here, too, they see how children imitate those who are older; hence the necessity for care on the part of the mother in regard to the kind of example she sets her children, and her watchfulness in the choice of companions for them.

The discipline of the girls is firm, but kindly. Just as in a well-regulated home the daughter does not go away without the consent of her mother, so here the girls must have the matron's permission before leaving the grounds.

When girls go to town to shop or for other purposes they are always accompanied by a matron, or by a teacher who acts as chaperon.

General.—It is the constant endeavor of the commandants and the matrons to teach by kindness, example, and firmness that right conduct and right living are the only ways of growing into useful men and women. While certain rules must be made for the government of so large a number of young people, still the thought is always presented to the pupils that the rules are not to deprive them either of pleasures or of benefits, but that they are in reality mileposts to point out the way which has been found best for boys and girls to follow. The great rule, "Do Right," is the corner stone of all rules and orders.

The last Saturday evening of each month a general sociable for pupils and employees is held in the Gymnasium, and this form of entertainment gives ample opportunity for the proper association of the two sexes.

Physical Culture.

The department of physical training under an experienced physical director preserves the health of the individual, builds up the body by means of selected exercises, promotes correct habits of standing and walking, corrects improper postures and abnormalities, and, while furnishing a relaxation from the more arduous duties, improves the coordination of mind and body.

The daily drills are in free exercises, light gymnastics, heavy gymnastics, and gymnastic games. The free gymnastics instruct in the fundamental position of the feet, the legs, the arms, the trunk, and the head, used singly and in combination; light gymnastics, in primary and in advanced movements with wands, clubs, and dumb-bells; heavy gymnastics, in graded movements and combinations on the climbing pole and rope, climbing ladder, horizontal bar, traveling rings, trapeze, vaulting bar, horse, horizontal ladder, and parallel bars. Gymnastic games of passball, handball, and basketball vary the exercises. All the work is arranged in grades, both for the boys and for the girls.

Regular periods are devoted each day to this instruction, and it is compulsory for all students.

In addition to the gymnastic work, participation in outdoor games is encouraged. There are tennis courts and croquet yards for the young men and the young women.

On an additional athletic field which has been constructed, much pleasure and exercise are afforded the boys who are not members of the regular school teams.

The large rectangular bottom, which forms a portion of the school grounds, is flooded during the winter months and is eagerly sought by all the students for skating and sledding.

Music.

Music adds much to the life and happiness of the school. It forms an important part of all the social and religious functions and the athletic and military exercises.

In conjunction with the band, there is an orchestra composed of both boys and girls, which plays for the school entertainments, Sunday evening services, etc.

There is, too, a vocal department, which includes the class

work and singing exercises, where all are taught the rudiments of music.

There are quartets and choruses and other small musical organizations in which both boys and girls take part. These add variety and pleasure to the meetings of the various literary societies, the Y. M. C. A., Y. W. C. A., and at students' social gatherings.

Band and orchestra instruments and musical supplies are furnished by the school. No charge is made for instruction in music, except for piano lessons, for which a charge of twenty-five cents for each lesson is made.

Athletics.

The various student teams maintain athletic relations with other schools in football, baseball, lacrosse, basketball, and track sports. The Indians have a reputation for clean playing and gentlemanly behavior on the field, which has created a most favorable impression on the public in favor of the Indian race.

The faculty maintains close supervision over athletics, to the end that they may be free from professionalism and not detract from the legitimate work of education. The time devoted to training comes out of the students' playtime and students are not allowed to neglect their studies and school work for this purpose. Practically all the students are afforded the chance to join some of the school teams.

No charge is made to students for admission to the athletic games; neither is there any student-fee for the maintenance of athletics.

Outing System.

All pupils are advised to spend at least one year in a country home. During the winter, they attend the public school in their neighborhood. Patrons and pupils agree to certain rules governing their relations to each other and to the school. Pupils remain under the jurisdiction of the school and are visited at intervals by the Outing Agent, who makes a written report concerning their health, condition, and progress.

Pupils receive regular wages, a fixed portion going towards their personal expenses and the remainder being deposited in the school bank for them, and so held until the holders leave school for their homes, or go to higher institutions of learning.

No other branch of the school's work is of greater benefit than the "Outing." In the majority of country homes to which pupils go they are considered as members of the family and are as carefully trained as are the sons and daughters of the family. Many a "country mother" has kept a hold on an Indian girl for years after her return to the reservation, and through correspondence has fastened the influence of civilized life on the rude home-making in those isolated spots.

During the past few years the Outing System has been developed to furnish additional training and experience to students in the various trades which they learn at the school. The young men are placed in shops, and with contractors and manufacturing establishments, where they work side by side with white mechanics, and not only acquire a knowledge of their trade as it is conducted in the "dollar-and-cents" world, but they also gain a thorough familiarity with the conditions surrounding the American workman; and they learn, as no school can teach them, the significance of a full day's work.

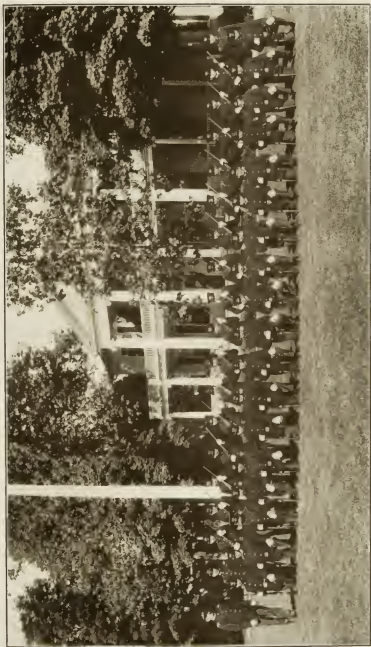
While out under the Outing in these trades our students are paid in proportion to the kind of work they do and the ability and skill they manifest in doing it.

The total earnings of students under the "Outing" for the year ended June 30, 1914, was \$22,291.39.

New Domestic Science Department.

When the Business Course at Carlisle was discontinued early last year, the three rooms in the Academic Building formerly occupied by that department were rearranged and equipped as kitchen, dining room, and class room, for the domestic science classes, and eighty girls have been receiving regular instruction in this department since it was opened about the middle of the year.

There have also been provided and equipped in the Girls' Quarters during the past year a small kitchen and a small dining-room for their use. Here the girls, under the instruction and supervision of the matron, cook and serve little informal dinners to which, occasionally, some of their young men friends are invited; or a number of girls may desire to purchase a few articles from the market and cook a little dinner for themselves. The girls



WINNING TROOP, ANNUAL COMPETITIVE DRILL, 1915.—CARLISLE INDIAN SCHOOL.



take a keen interest in this "real housekeeping" and the little kitchen and the dining room are in almost daily use by some of them.

The latest addition to the equipment at Carlisle for teaching home-making in a practical way is the little Model Home Cottage recently constructed and located between Teachers' Quarters and the Academic Building. This is a small, inexpensive, five-room cottage. It has neither electric lights, steam heat, nor plumbing. The furniture is simple and inexpensive. It is a model home, such as any girl might well feel proud to preside over, yet so plain and simple in equipment and furnishings as to present a striking contrast with the modern equipment found in the other buildings at the school. This model home is conducted on the family unit plan, with a teacher acting as the mother of the family. Four girls at a time make up the "children" of the household. These are selected from among the older and more advanced girls. The details are changed every four weeks, each girl acting as manager of the home for one week, so that during each school year about forty girls receive this practical training and experience.

It is in this "model home" that girls receive practical instruction in home management, household accounts, home cooking, home nursing, home laundering, home sanitation, etc. It is in all essential respects a model *home* for the girls and a model *house* for the boys and within their present or possible future means.

Summer Schools.

Owing to its unusually favorable location in one of the great eastern educational centers, Carlisle is in a position to offer excellent opportunities to those of its students who are ambitious to acquire a thorough, practical education and make the most of their time.

There are a number of excellent summer schools within convenient distance of Carlisle where ambitious students may take short courses in such subjects as they may be behind in, thus enabling them to make the next higher class the following year. Indian students are kindly received and find sympathetic encouragement at these summer schools and, by coming into contact with ambitious white students, their enthusiasm is aroused and they return to the school with renewed zeal and determination. The

cost of a six weeks' summer school course, for board, room, tuition, etc., is from \$40 to \$60, depending upon the class of school selected. Some students prefer to use their money in this way rather than spend it in making trips to their distant homes every summer. Others use the money they have earned under the "Outing" for this purpose.

For those who prefer to remain at Carlisle during the summer vacation months, or who have no funds with which to meet the expense of attending summer school away from Carlisle, and who are ambitious to make more rapid progress in their studies, arrangements are being made to conduct special classes at the school during the summer vacation. Special encouragement is given the older students to remain in school until they complete some course and acquire such thorough education and training as may make them efficient men and women.

Opportunities for Further Education and Training.

Carlisle offers exceptional opportunities to those students who complete one of the courses to continue their education and prepare themselves for professions or as skilled tradesmen. There is located in the town of Carlisle a new \$200,000 Technical High School; Conway Hall, a college preparatory school; and Dickinson College. These schools are open to any of our students who can meet the entrance requirements, upon payment of the usual tuition fees. All students who are given permission to attend schools in the town of Carlisle are required to observe all the rules of this school and to perform some work in return for their board and other advantages of the school. They are also required, before enrolling in these schools, to deposit with our Financial Clerk funds in an amount sufficient to cover the cost of their books and tuition for one year, which need not exceed fifty dollars for the High School, or one hundred dollars for Conway Hall or Dickinson College. No student will be extended this privilege who neglects to make good use of his time or whose conduct is not at all times satisfactory. This is a privilege given as a reward for merit.

Arrangements have been made whereby a limited number of deserving and ambitious girls, who desire to fit themselves for the profession of teaching, may attend the State Normal School at West Chester, Pa., under our Outing System. Homes in good

families in the town of West Chester, where girls may earn their board by assisting with the housekeeping mornings and evenings, are provided. Tuition and books for the year cost about \$100 for each student. The Carlisle School furnishes such students their clothing and helps them in other ways. It is an excellent opportunity for worthy and ambitious Indian girls who desire to fit themselves for independent and useful lives.

Carlisle students who attend this Normal School are carried as "Outing Students," and are under the rules of the Carlisle "Outing System."

Other Opportunities.

From time to time students who have proved themselves worthy and who have shown ability for advanced training in their trades or along general lines as leaders and foremen, are given opportunity of entering large manufacturing and industrial plants for training as special skilled workmen or as foremen.

Nineteen Carlisle students are now taking a student's course in the Ford Automobile Works, Detroit, Michigan. They are required to attend night school and to observe the general rules of the "Outing System." Concerning these Carlisle Indian students, an officer of the Ford Automobile Company says: "They have shown more than the average aptitude and have made better progress than the average student taking similar courses in our works. We have been impressed with the concentration they show, their regularity of attendance, and the patience and determination they exercise in mastering all the details of the work with which they come in contact."

Others will be placed in similar large plants from time to time as opportunity affords.

The doors of Carlisle, with all her opportunities, are open to ambitious Indian young men and young women who can meet the entrance requirements and who can prove themselves worthy. Preference is given to full-blood Indians and to those Indians who live on reservations where adequate school facilities are not afforded. Those who live in towns or in communities where public schools are readily accessible will not hereafter be enrolled at Carlisle. The room is needed for the poorer Indians who do not have school advantages at home.




JUST now the shifting of vocational education from the field of industry to the school is the crucial problem of our school organization. Our schools have always been dominantly cultural in their aims, but the new vocational education must be practical. The old education, in order to maintain national solidarity, dealt with a common stock of facts, habits, and ideals necessary to all men; the newer type of training, which is to supplement this traditional culture, is as variable and specialized as men's occupations. In accepting responsibility for the vocational training of American children, the school plunges itself into a period of transition, in which old ideals are futile and new ideals but half-discovered.

DAVID SNEDDEN

Commissioner of Education for Massachusetts.

SYNOPSIS OF COURSES



T HAS taken the United States a long time to see the need of vocational education. The industrial revolution has been so gradual and the stream of immigration has so largely supplied our demands for skilled labor that we have drifted into a perilous situation without any sense of the danger ahead. * * *

The State can not continue to spend vast sums on high schools and universities and neglect vocational training without repudiating the reasons usually given for maintaining schools of any sort as a public charge. Self-preservation by training future citizens is the justification of the State for spending money on schools. We have come to the point where the State must enter the field of industrial education, and thus give equal opportunity to artisan, farmer, merchant, and professional man. Justice to the individual and the welfare of the State both demand this course.

DR. JOSEPH S. TAYLOR

District Superintendent of Schools, New York



Foreword



N presenting this synopsis of the courses of study for Carlisle Indian School the aim is to give to students, teachers, vocational instructors, and to others interested in Indian education a rather clear and definite idea as to the amount of academic work offered and the nature and kind of vocational training provided.

The Carlisle Indian School is not a university, nor is it a college; it is not even a preparatory school for college entrance. It is a vocational school in the strictest sense of that term. The Commercial Course and the Courses in Telegraphy and Photography described in previous catalogues of the school have been discontinued; also the First, Second, and Third Grades have been eliminated from the course, so that only those pupils who have at least completed the Third Grade are now enrolled at Carlisle. It is deemed advisable to make these statements here, because of the fact that students have frequently come to Carlisle under a misapprehension of the real aims of the school and of the courses offered.

Careful investigation has disclosed the fact that the great majority of our students are relatively much farther advanced in industrial and vocational work than in their academic studies. It has been found that a large number of young men and women between the ages of eighteen and twenty-four years become very proficient in trades or in domestic occupations before they complete the intermediate grades. Many of these students have been in school for a number of years, devoting from fifteen to twenty

hours per week to academic work, and from twenty to twenty-four hours per week to productive industrial work. True, some of this industrial work has little or no educational value, but the work must be done in order to properly carry on schools of the nature of Indian boarding schools, and the students must do the greater part of that work. This is perfectly right and proper so long as pupils are assigned to tasks suitable to their age and physical strength. It affords them an opportunity of earning their own way through school (for the Indian boarding schools could not be maintained on the amounts appropriated by Congress for their support were it not for the fact that students are required to do the washing, ironing, cooking, baking, sewing, caring for the dairy, farm, grounds, buildings, etc.), and it operates against any feeling that the schools are simply charitable institutions. This plan necessitates that students work half the day and provides for their attending academic classes the other half.

With studies properly adjusted to the student's mental status and with non-essentials and useless repetition eliminated from the courses, this should not be a serious handicap. In fact, it has been demonstrated in schools for whites that pupils can complete a grade a year, by taking academic work only one-half day and doing vocational work the other half. In his annual report for the fiscal year ended June 30, 1913, Dr. P. P. Claxton, United States Commissioner of Education, makes this statement:

Careful studies made in different parts of the country and in schools of different kinds indicate that children really do not study in school more than an average of three hours a day, whatever may be the length of the daily session. For children in the primary grades the time is less; for the high-school grades, somewhat more. This includes not only the time children give to their studies out of class but the time when they are really attending their work in class. This indicates the desirability of reorganizing school work in such a way as to give three hours a day for intensive school work of the ordinary type, and to provide four or five hours of productive work suited to the capacities of the children either at home, in shops under good conditions, in outdoor gardens, or in shops provided by the school.

It is coming to be more and more recognized that too much of the ordinary course of study in the grades is the accumulation of years of custom, and that there is all too much of non-essentials

and unprofitable repetition in the elementary courses. Especially is this true as to the subjects of Geography, Arithmetic, History, Physiology, etc. These subjects are usually taken up in the primary grades, in simple form, and repeated in the intermediate and grammar grades with slight modification and in a little different language. In some popular text books of two-book series, the greater part of the first book is often repeated in the second book *verbatim et literatim*. Such repetition is not calculated to arouse the enthusiasm of the boy or girl, and it is a waste of time to require a pupil to go over and over the same subject through two, three, or four grades. Also, many nonessentials may well be eliminated altogether. In arithmetic, for instance, such subjects as Powers and Roots, Ratios and Average, Approximations, Divisibility, Foreign Money, Metric System, Partial Payments, Duodecimals, Stocks and Bonds, Bank Discount, etc., should be eliminated from courses designed for average Indian students. With this idea of eliminating needless repetition and nonessentials from the grade courses, we have so planned the work of those courses as to provide for students completing a grade a year.

In this synopsis is introduced the new three-year vocational courses, which have recently been approved by the Commissioner of Indian Affairs, effective at the beginning of the next school year. While these courses contemplate, in a general way, that students to be eligible for entrance to them must have completed the Eighth Grade, still no hard and fast rule is laid down. Much depends upon the age and experience of the student. In some cases it is possible for older boys and girls who are well advanced in their vocational work to enter one of the three-year courses, though they may have completed only the Sixth or Seventh Grade, conditioned in such subjects as it may be found necessary to require them to continue or which they have not had. More time is devoted to study and less time to vocational practice work in the three-year courses than is provided in the grade courses. Pupils older than the average for their grade are pushed along as rapidly as possible, and more consideration is given to the older students who have only a few more years to remain in school.

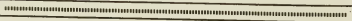
By fully appreciating and keeping constantly in mind the probable future living conditions of Indian students, and the difference which must be made in teaching the various subjects of these courses as a part of a vocational course, and in teaching the same subjects as merely cultural or college preparatory courses, it is believed that there should be no trouble in properly correlating the academic and vocational work of the school, and in giving to the Indian boy and girl the academic and vocational training which will function properly in their lives after they return to their homes, or take up the work of their chosen vocation in competition with whites away from the reservation.

Through the courtesy of President H. J. Waters, of the Kansas State College, Manhattan, Kansas, it was arranged to have Professor H. L. Kent, Principal of the School of Agriculture at that College, come to Carlisle, study our problem and assist in working out the details of the new three-year vocational courses in Agriculture, Mechanic Arts, and Home Economics. Professor Kent spent several weeks at the school and his years of experience as a normal and agricultural teacher, his experience in agricultural extension work, in organizing community centers, and in preparing vocational courses of study for high schools, had specially equipped him for the task. His interest and his careful, painstaking, practical work are shown in the logical arrangement and definite aims of these vocational courses for Carlisle.

Indian young men and young women who are contemplating applying for enrollment at the Carlisle school are advised to read this catalogue and synopsis of courses very carefully, and if further information is desired they should communicate with the Superintendent of the school, who will promptly answer any questions or inquiries.

OSCAR H. LIPPS,
Superintendent.

July 1, 1915.





The Grade Courses.

These courses have been prepared with the needs and requirements of the average Indian boy and girl definitely in view. They do not closely follow the conventional, especially with respect to the teaching of such subjects as Geography, History, Physiology, Arithmetic, etc. The dominant aim is to make the subjects taught in these courses function in the future lives of Indian students.

Regarding the prefatory teaching so common in elementary schools, Charles B. Gilbert, in the preface to his book, "What Children Study and Why," very aptly says:

Why is the course of study in our elementary schools constituted as it is? What particular gift has each of the conventional school studies to bestow upon the children, and hence upon society, in justification for its place in the curriculum and as compensation for the labor, the tears, the time of the students, and the care, the effort, and the financial expenditure of the community?

These are questions that should be answered by teachers, parents, and public officials, if the best results are to be obtained from the schools. But most teachers take the course of study handed to them from above and teach it perfunctorily, without much serious consideration of its reason for being or for its motive. Most parents accept the courses forced upon their children, more or less willingly, but with the vaguest notion of their meaning or motive. Most school officials accept the conventional curriculum inherited from the past and used by their neighbors and pass it on to their own schools, taking for granted that it is right.

As the Government Indian schools are more or less independent and are not compelled to conform to any scheme of education prescribed for the conduct of the public schools of the country, they are at liberty to deviate from the conventional and fit their courses to conform to the needs of their students. To that end

these courses will be changed or modified from time to time as the needs and interests of the students may demand, or as experience may prove advisable.

Outline of Grade Courses.

Fourth Grade.

Reading and Spelling
English Language I
Elementary Arithmetic I
Personal Hygiene
Biography and History
Stories I
Nature Study I
Writing and Drawing
Physical Culture
Vocal Music
Industrial Training*

Fifth Grade.

Reading and Spelling
English Language II
Elementary Arithmetic II
General Hygiene
Biography and History
Stories II
Nature Study II
Writing and Drawing
Physical Culture
Vocal Music
Industrial Training*

Sixth Grade.

Reading and Spelling.
English Language III
Practical Arithmetic I
Applied Physiology
United States History I
Geography I
Writing and Drawing
Physical Culture
Vocal Music
Industrial Training*

Seventh Grade.

Reading and spelling
English Grammar I
Practical Arithmetic II
Sanitation and Health
Geography II
United States History II
Elementary Agriculture
Physical Culture
Vocal Music
Industrial Training*

Eighth Grade.

Reading and Spelling
English Grammar II
Practical Arithmetic III
Elementary Agriculture
History and Government
Elementary Science
Physical Culture
Vocal Music
Industrial Training*

* The Carlisle Indian School is primarily a vocational school and all students in the grades are required to devote one-half their time in learning to do things on the farms, in the dairy, gardens, shops, laundry, kitchen, bakery, dining room, sewing room, etc. Definite instruction is given to students in the grades in agriculture, in the various trades, and in the domestic departments of the school.

Description of Grade Courses.

READING.

Selected lessons from various series of regular school readers, such as the Riverside Readers, Stepping Stones to Literature, Lights to Literature, Farm Life Readers, etc. These lessons are supplemented by selections from such supplementary reading books as "Great Americans for Little Americans," "Legends of the Red Children," "A Boy on a Farm," "Fifty Famous Stories," "Stories of American Life and Adventure," "Stories of Industry," "American Indians" (Starr), "Pioneers of the Rocky Mountains and the West," "Black Beauty," "Wild Animals I Have Known," "Franklin's Autobiography," "Four Great Americans," "Four American Patriots," "The Great West," etc.

The range of topics in reading is wide, and although some lessons are given intensive study, the main purpose of the course is to give to the pupils the greatest possible opportunity for gathering interesting and valuable information from the printed page, to create and fix in each pupil the habit of reading, and to enable him to choose wisely, after he goes out to do for himself, what he shall read from the available field of printed matter. Although the aim of the reading course is co-ordinate with that of vocational instruction, still lessons having no literary value are not given any attention. Historical stories and stories dealing with the biographies of great men—especially those who have contributed toward the industrial development of the world—have a prominent place in the reading course.

LANGUAGE.

This work is mainly constructive. Technical grammar receives but little attention, excepting such phases as may contribute toward enabling the pupil to express his thought in correct English. The sentence as the unit of expression of thought is given first attention. After that comes the paragraph, and then the writing of whole themes. Very frequent drill in oral composition is required. Much of this is in the form of narrations and descriptions relating to the various activities of the school. Letter-writing and all kinds of business forms receive careful attention. All written work is judged by the teacher from the standpoints of thought, language, spelling, and penmanship; and

defective work is required to be rewritten as many times as may be necessary for putting it into correct form.

ARITHMETIC.

The chief aim is to give every pupil a thorough grounding in the four fundamentals; in common and decimal fractions; in divisors, multiples, and cancellation as contributing toward a knowledge of how to handle fractions; and to aliquot parts and the rapid solution of concrete problems. After this may come a study of such of the measures as are in common use—dry, liquid, linear, square, solid contents, lumber, land, avoirdupois weight, etc.—and percentage and such of its applications as are involved in average every-day life. Much supplementary work is given in the form of problems and exercises bearing upon farm work and other industries. The farms, the shops, the dormitories, the dining room and kitchen, the store-keeper's office, the printery—all are found to be the source of much valuable material for problems and exercises of vital value. Special stress is laid upon the arithmetic of gardening, farming, marketing, land measures, building, repairing, fencing, irrigating, draining, lumbering, and all other topics related to the making and maintenance of rural homes.

NATURE STUDY AND GEOGRAPHY.

The study of text book geography is preceded by a study of nature in its broadest and most geographical phases. A weather chart is kept. Rain, sleet, snow, hail, frost, dew, temperature variations, winds, rain signs, change of seasons, soils, rocks, cultivated and uncultivated plant life of the community, domestic and wild animals, domestic and wild fowl, seed germination, self-planting, self-protection in plants, self-pollination, cross-pollination, gravity, the lever, the pulley, the inclined plane, etc., etc.,—these and hundreds of other phenomena of nature are worked into lessons of vital and direct application to the lives of the pupils themselves.

Supplementary to this comes the reading of selections from such booklets as "All the Year Round," "Animals Wild and Tame," "Friends in Feathers and Fur," "Neighbors with Claws and Hoofs," "Neighbors with Wings and Fins," "Our Feathered Friends," "Seaside and Wayside," "Story of a Little Water Drop," "Stories from Garden and Field," "Stories of Woods

and Fields," "In Field and Pasture," "A First Book of Birds," "Ten Common Trees," "Nature Studies on the Farm," "Plants and Their Children," "True Bird Stories," "Squirrels and other Fur-Bearers," "Getting Acquainted with Trees."

After this comes text book work in geography, with special emphasis on the geography of the United States.

HYGIENE AND SANITATION.

How to keep clean and why it is necessary to do so; how to keep one's surroundings in a sanitary condition; care of the teeth, the eyes, the skin, the hair, the nails; how and what to eat and drink and what not to eat and drink; how to prevent and avoid disease; first aid to the injured; ventilation; out-door life, exercise, deep breathing, and all other topics related to the general subject of good individual and national health, are given proper time and attention under this heading. No attempt is made to teach the facts of human physiology in the old barren way. No subject under this heading will receive any attention unless it has some direct relation to the physical well-being of the pupils and the people of our nation.

HISTORY.

The first lessons in history come in connection with the reading lessons. These are in the form of biographies and stories. In the higher grades there is a limited amount of regular text book study, where the emphasis is placed upon the social and industrial development of the country.

DRAWING.

Freehand drawing is given throughout the course. Most Indian pupils come to us with some pretty definite knowledge of drawing already fixed in their minds. For such pupils the aim of the teaching work here is to systematize that knowledge, to eliminate anything of an impertinent nature, and to strengthen and add to that which is of real value. One of the aims in teaching drawing to Indians is to standardize, perpetuate, and give to the world at large the priceless decorative designs peculiar to the race.

MUSIC.

Regular instruction in vocal music is given throughout the grade course.

MANNERS AND MORALS.

Definite instruction in good manners, right conduct, and social and civic duties has a place on the program throughout the course.

AGRICULTURE.

Agriculture is taught in the last two years of grade work. This is a general elementary course and is taken by both boys and girls. For the girls it gives the general knowledge of agriculture, which is so much needed by the farmer's wife. It also gives some helpful training to boys who will leave school when the grades have been completed. It will not come amiss even in the lives of those boys who later take up one of the trade or mechanic arts courses. Nature study work is given throughout the grades preceding this work, so that pupils may have some preparation for the work in elementary agriculture.

As much time as possible is given to work with materials, that is, plants, soils, insects, animals, etc. Not only are these materials used, but the work in the classroom is related as definitely as possible to the farm, garden work, and the work about the school grounds.

The following is a brief outline of this work in the grades:

FIRST YEAR.

INTRODUCTION.

Farming as an industry—National economic importance.

Farming as a business—Need for training in business management and principles of science.

Some illustrations of science applied to farming—Examples of insect control, compounding of fertilizers, balancing of rations, testing of dairy herds, etc., given briefly.

Types of farming—Grain, livestock, dairy, general or diversified, truck, etc. Reason for specializing.

Importance of livestock in any of these types—Used for power, for converting rough or cheap feed into high priced marketable products, such as wool, butter, eggs, meat, etc.

STUDY OF LIVESTOCK.

Horses—Types and breeds—origin, characteristics, uses—special emphasis on draft horses. Parts of the horse, good and poor horses. Care and management of the horse, feeding, housing, working, etc., Feeds and Feeding emphasized.

Cattle—Both beef and dairy cattle studied in same way as horses, except that more emphasis is placed on feeding for special purposes—fattening and



THE ACADEMIC BUILDING-CARLISLE INDIAN SCHOOL



CARISLE'S GRADUATING CLASS OF 1915

milk production—and the production of these animals. Care and handling of milk. Elementary work on preparation of rations is given in this connection.

Hogs and Sheep—Study types and breeds, feeding, housing, production and uses.

Poultry—Breeds, production, housing, feeding and general management of flock. Emphasis on feeding and sanitation. Care and marketing poultry products.

Some work is given to the study of the life history of insects during the spring, so that the work may be continued the following fall and something of the life cycle of insects of economic importance learned before the pupils study crops, orcharding and gardening.

SECOND YEAR.

HOW PLANTS GROW.

The plant and its parts—Flowers, fertilization, seed production and distribution. (This work is done early in the fall while materials for study may be secured from fields and grounds.)

Parts of the plants—Function and structure of parts and processes of growth. Manufacture and storage of foods. Relation of plant to soil. Plants as food for man and animals.

Fungus plants—Bacteria and plant diseases.

THE SOIL.

In relation to plant growth—Origin, kinds, physical nature—variation in physical characters of different kinds of soils and reasons for variations.

Soil moisture and its movements—Storage, evaporation, etc.

Plant foods in the soil—Kinds, availability, loss, uses to plants, how taken up by plants, relation to soil moisture, etc.

Tillage—Soil management for maintenance of fertility and good physical condition, seed bed preparation, cropping, etc.

CROPS.

Grain and Forage Crops—Study of important crops—Characteristics and kinds of each. Planting, cultivating, caring for, and harvesting of each. Crop rotation and cropping system as related to soil, climate and livestock on farm. Weeds, diseases, and insects and their control. Applying as reasons for agricultural practices the principles learned in the study of plants and the soil. Learning to recognize different grains and crops; selecting and testing corn and other crop seeds.

GARDENING AND ORCHARDING.

Selecting a site. Soil preparation and management. Planning a garden, growing plants—hotbeds—transplanting, planting, care, and cultivation. Insect and disease control.

SELECTING ORCHARD STOCK.

Planting, pruning, protecting, cultivating, and caring for trees. Improvement of fruits—budding and grafting. Propagation. Spraying for insects and diseases.

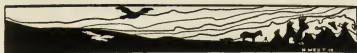
This work in orcharding includes both tree and bush fruits.

A few lessons are given to flower gardens and general tree and shrub planting, windbreak planting and woodlot management.

To teach the livestock work before the work on the crops and soil is contrary to the most common practice, but experience proves that this order of work is most successful in arousing and continuing the interest of the pupils.

Some industrial training in blacksmithing, painting, carpentering, cement work, harness mending, etc., is given to boys in the seventh and eighth grades, who expect to farm. This work is given whether they will remain for the advanced work or not.





Advanced Vocational Courses Offered.

Aim of the Three-Year Courses.

Three-year vocational courses in Agriculture, Mechanic Arts, and Home Economics, and a one-year Preparatory Course in Hospital Nursing, are offered.

THE COURSE IN AGRICULTURE.

This course is planned and conducted with the vocational aim clearly and definitely dominant. The work in agriculture is the important and determining work, the nucleus about which the academic work is arranged. The character and amount of the academic work is determined by its relation and importance to the problems of agriculture and its vital necessity to the future Indian farmer. The aim is to produce not a scientist, nor a specialist, but a practical efficient farmer, whose success will depend fully as much upon his skill in doing which results from practice and training as it results from scientific knowledge and managerial ability. The course includes all of the work which is found on the ordinary, diversified farm. This will fit the students to return to their own land, situated under whatever conditions it may be, and adapt themselves to those conditions and successfully undertake the type of farming which must be followed there.

The work in history, civics, economics, and farm writing aims definitely at training for citizenship. The general living conditions and school atmosphere as well as the social life and student enterprises at Carlisle add materially to the effectiveness of this work.

THE COURSE IN MECHANIC ARTS.

No course in mechanic arts in any school conducted as a school can turn out experienced master craftsmen. The function of this course at Carlisle is (1) to help a boy to find himself and to select that life work for which he seems best fitted and has most chance of success, and (2) to give him such trade and technical in-

formation and training as to enable him to leave school not a finished workman, but a partially trained workman, who, after getting real trade experience, will become the exceptionally trained and skilled workman capable of acting as foreman, boss, contractor, or manager.

The academic work contributes definitely and distinctively to trade problems, so that this work, too, may function in the future life of the mechanic. This work supplements the practical work, and fits the student to plan work, to follow the plans of others, to make estimates, and to do work in a businesslike, orderly way. The practice work aims to give an orderly experience in and reasonable familiarity with processes, operating machines, doing trade work, selecting and using materials, planning jobs, and directing work. In all practical work the student is taught to apply and use the academic work.

THE COURSE IN HOME ECONOMICS.

The girls who take the course in Home Economics should become the model housewives and mothers in the communities to which they return. This course bends all its efforts to training them to that end. All of the work in housewifery is planned and conducted with the home of the farmer or workman of very moderate means in mind. Therefore the work is essentially practical rather than idealistic. Management of such a home and of such an income is emphasized throughout. Training for motherhood and for the cultural and artistic part of the home life is also provided, i. e., these girls must be able to make their future homes pleasant and attractive, as well as economically and hygienically efficient, and they must give to their children the culture and refinement essential to racial progress. This part of their education must be secured through training in social observances and usages, through the special type of English work provided for this course, through the special courses dealing with home management, motherhood and the care of children, and through the several art courses.

Special effort is made to preserve all that is best in Indian folktales and hero stories as a race heritage, which is to be handed down by mothers to their children as an inspiration for racial advancement and progress. In the same way but in larger measure Indian art is fostered and encouraged in every possible

way. Girls are encouraged to get all that is best in their tribal art, to become proficient in its use, to understand its symbolism, and to apply it to the materials and furnishings of their new types of homes.

Special attention is also given to fitting these girls to take part in the social and community life of their future neighborhood and to enable them to exercise a helpful and wholesome influence on all community activities.

Relation of School Work to Agricultural Practice.

All vocational courses contemplate at least three lines of development on the part of the pupil; (1) skill in doing, or practice in applying in an economical and effective way the principles and processes learned in the classroom; (2) such an understanding of the principles underlying and responsibilities for variation in practice as will enable him intelligently to modify practice as conditions may demand; (3) such a mastery of principles, practice and business economy as will fit for managerial work.

The success in developing skill and managerial ability depends very largely upon the helpful relation of the work on the school farms, campus, and in the greenhouse, and the instruction in the classroom. The conditions at Carlisle are such as to make such a relation practicable. The work in agriculture has been so planned as to take the best possible advantage, seasonal and otherwise, of the opportunity of relating classroom and industrial work.

Boys in the first year class of the course in agriculture are detailed to care for, operate, and repair the farm machinery, to make repairs and improvements about the farm buildings, fences and equipment, to care for the poultry, and to do the gardening work and seed testing.

Second year boys are detailed to do the work connected with planting, caring for and harvesting the grain and forage crops, to care for the orchard and bush fruits, and to feed and care for the horses, hogs, cows and calves.

Third year boys are in the main detailed to do the butchering, dairying, and caring for the dairy herd, and the road, woodlot and landscape work, and manuring, liming, and fertilizing the farm. However, the managing and accounting work is not lost

sight of and these boys are given opportunity to get data for the farm accounts work, to confer with the farmer and assist in planning the work, and as much as possible to act as gang foremen. Actual farm practice is not limited to the term during which a subject is being pursued in class, but as far as possible is continued throughout the year, so that students may become fully acquainted with all phases of the work.

While the program as above outlined cannot always be strictly adhered to, it is followed as closely as possible under the varying demands of farm work.

The above emphasis on practical farm work does not take the place of formal laboratory work entirely. Wherever laboratory exercises are necessary to a thorough understanding of scientific principles or as a training for practice, such exercises are given entirely separate from actual farm work. Examples of such exercises are experiments illustrating capillarity in soils, puddling of soils, percolation of water, practice in budding and grafting and in testing seeds, judging grain, practice in candling eggs, testing milk, etc.

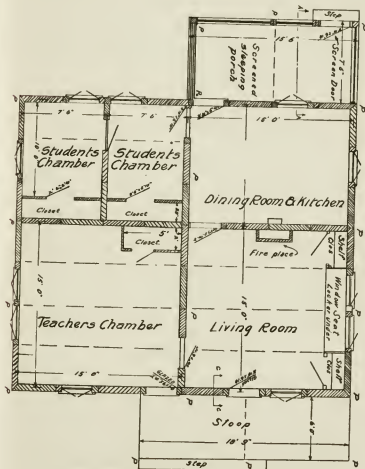
LABORATORY EXERCISES IN AGRICULTURE.

Because of the opportunity to do real farm and garden work with farm equipment, the amount of material and apparatus needed for laboratory work is not great. Of the special apparatus required, much is made in the school shops. Bins for the different types of soils, corn racks and testing boxes, brooders for poultry work, etc., are all made at the school. Some equipment has been purchased, such as a Babcock milk tester, an incubator, glass tubes, and other supplies, for soil experiments, etc. A special laboratory room has been set aside for the grain judging and testing work, germination tests, etc. The special tables and other furniture needed from time to time are made in the school shops.

LIBRARY FACILITIES.

There are ample facilities for library reference work in agriculture. This is of special importance, because of the varied conditions and agricultural practices existing in the widely scattered homes of the Carlisle student body. No text-book or series of text-books can be depended upon exclusively.

The school is on the mailing list of a number of the experiment stations and of the U. S. Department of Agriculture. This brings to the school library the latest and best of scientific information and agricultural practice. These bulletins are arranged, classified, and indexed so as to make them readily accessible for student reference. The best and most important of them are se-



Floor Plan—Model Home Cottage, Carlisle Indian School.

cured in numbers sufficient to be used as supplementary texts by members of the respective classes to whose work they may apply.

Some of the best of the farm papers and magazines are included on the list of periodicals which come regularly to the library. Some of these are of a general character, such as *The Breeders' Gazette*, *Wallace's Farmer*, and *The Rural New Yorker*. Others deal with special types of farming, for example, *Hoard's Dairyman*, *Green's Fruitgrower*, etc. At least one daily of the character of the *Drovers' Telegram* is on the list. This is used to train the pupils to study market reports and to form the habit of keeping in touch with markets and marketing. This is of great importance for boys in the third year, who are studying *Farm Management and Accounts*.

THE FARM UNIT BASIS.

A practical and helpful addition to the Carlisle school equipment is the small farm home, farm cow barn and cows, farm flock of poultry, and farm garden, now being constructed and provided. Students in the agriculture and home economics courses do not need training for work as employees in a large organization, but as masters and mistresses, home makers and farmers, on a small farm with a minimum of equipment and that of the kind which their station in life will probably enable them to provide. When the cottage, small farm, poultry yard, small gardens, etc., now being planned are completed and put to the use which can be made of them, the value of these courses will be multiplied many times. This will put the management of the home and a part of the farm on a small practical basis; it will teach economy and develop ingenuity and inventiveness as no other arrangement could.

Vocational Guidance.

During the first year in the vocational course there should be some definite attempt to give boys some positive information which may help them in making a decision as to their future careers. This may best be done through the reading and English classes, provided proper selection of reading material is made and proper opportunity for discussion given. A part of this work is given by the superintendent, principal teacher, and teachers of the various industries. The talks aim to give definite ideas of

pay, opportunities for advancement, social conditions, independence, hours and conditions of work, and especially personal ability and characteristics essential to success.

This work is given early enough in the term of attendance to help pupils choose wisely. The final choice of a course and assignment to the course is made by a conference between the student and the superintendent of industries. The superintendent of industries, through conferences with all different persons for whom the student has worked, learns all he can of the peculiar fitness of the individual for one or another of the vocations. He also learns all he can concerning the boy's property, its location and adaptation for agricultural work or nearness to a favorable location for following a trade. Every possible precaution is taken to prevent the boy from drifting into the ranks of unskilled labor when he leaves the school.

School Work During the Summer.

Some school work is offered during June and July. This means economy in the use of the school plant and equipment, since it is then in use a greater portion of the year. Some of the teachers are on duty during those months anyhow, so there is no added expense for instruction. Many of the students remain at the school during the summer, so that the vocational, agricultural, and home economics practice, are continued during those months. By this arrangement pupils are afforded an opportunity to shorten the time required to complete the course, or it offers opportunity to students who have failed in one or two subjects to make up that work and so stay with their class. No work will be offered regularly, but each summer such work as seems to be needed most, and such as can be most conveniently offered, will be given. In general, the vocational courses will be given the preference in summer work, since they can be very closely connected with practice.

Arrangement of Courses.

AGRICULTURE.

The minimum of academic work is placed in the first and last years, not only because prerequisites may thus be most conveniently provided for, but because (1) it is important that first year students devote a major portion of their time and thought

to this work in order that they may come to see its importance and the problems to be solved, (2) having realized the problems to be solved they will study such subjects as chemistry and physics with a different interest and with the experience necessary to apply the principles of those sciences, (3) and finally during the third year, after the general training and practice of the preceding years, much time is given to farm management and accounts in order to develop foresight, business habits and managerial ability.

MECHANIC ARTS.

In the first year of this course a maximum amount of different industrial work is given in order to help the boy find himself and choose his trade wisely. During the second year when all the industrial time will be spent on the chosen trade, more academic work is given. In the third year, special emphasis has been placed on the economic and industrial life of the nation, in order that the boy may have some rather definite conception of the social surroundings and organizations by which he will be surrounded.

The work in mathematics and drawing has been distributed throughout the course as largely as possible. This in order that not too much mathematics may be required at one time, and also that the work in both mathematics and drawing may as largely as possible be applied to the trade work the pupil is then doing.

HOME ECONOMICS.

This course has been arranged with a view to putting a maximum of fundamental work for home makers in the first two years and the cultural and management work in the third year. Certain subjects are placed in the third year in order that prerequisites may be given, and that students may be more mature and experienced before these are given. Certain others are placed in other terms in order that advantage may be taken of favorable seasonal conditions for giving these subjects, e. g., home dairying and poultry raising.

In planning the course, due attention has been given to economy in teaching, that is, to arranging work so that wherever possible one teacher may handle in a single class students in the different courses.

Outline of Courses.

Course in Agriculture.

(NOTE—The numeral immediately following the name of a subject indicates the number of credits, and those in parenthesis the hours per week of recitation, laboratory and vocational practice, respectively.)

FIRST YEAR.

FALL TERM.	WINTER TERM.	SPRING TERM.
English Readings. 4(4-0)	Grammar and Composition. 4(4-0)	EL Composition I. 4(4-0)
Vocational Arithmetic. 4(4-0)	Vocational Algebra. 4(4-0)	Applied Geometry. 4(4-0)
Elementary Botany. 4(2-4)	Seed and Soil Study. 4(2-4)	Elementary Zoology. 4(2-4)
Stock Judging I. 4(0-2)	Poultry Raising.† 4(2-2)	Gardening.† 4(3-4)
Farm Practice and Farm Machinery.† 4(1-12)	Farm Blacksmithing.† 4(0-12)	Farm Carpentry.† 4(0-8)
Physical Training. Band or Orchestra.*	Physical Training. Band or Orchestra.*	Physical Training. Band or Orchestra.*

SECOND YEAR.

English Classics I. 4(4-0)	EL Composition II. 4(4-0)	EL Rhetoric. 4(4-0)
EL Chemistry I. 4(3-2)	EL Chemistry II 4(3-2)	EL Chemistry III 4(3-2)
EL English History. 4(4-0)	American History. 4(4-0)	Civics. 4(4-0)
Stock Judging II. 4(0-2)	Feeds and Feeding and Farm Practice.† 4(3-12)	Farm Insects and Bee-keeping.† 4(2-4)
Grain Crops and Farm Practice.† 4(3-12)	Forage Crops.† 4(3-2)	Fruit Growing and Farm Practice.† 4(3-12)
Physical Training. Band or Orchestra.*	Physical Training. Band or Orchestra.*	Physical Training. Band or Orchestra.*

THIRD YEAR.

Rural Economics. 4(3-0)	Farm Writing. 4(3-0)	Farm Animals. 4(3-2)
Agricultural Physics I 4(3-2)	Agricultural Physics II. 4(3-2)	Agricultural Physics III. 4(3-2)
Farm Management and Accounts. 3(3-2)	Farm Records and Accounts. 4(3-2)	Farm Management and Accounts. 3(1-8)
Breeds and Breeding. 3(3-0)	Dairying. 3(2-0)	Livestock Production. 3(3-0)
Soils and Fertilizers. 3(3-2)	Handling and Curing Meats. 2(2-4)	Forestry and Landscape Gardening. 2(2-2)
Marketing and Farm Practice.† 3(3-12)	Farm Buildings.† 3(2-8)	Road Building, Irrigation and Drainage.† 4(1-4)
Physical Training. Band or Orchestra.*	Physical Training. Band or Orchestra.*	Physical Training. Band or Orchestra.*

*Elective.

†Vocational practice periods are given in units of 4 hours each, or one-half work day. This time is devoted to actual practice work on the school farms or in the shops.

Course in Mechanic Arts.

(NOTE—The numeral immediately following the name of a subject indicates the number of credits, and those in parenthesis the hours per week of recitation, laboratory and vocational practice, respectively.)

FIRST YEAR.

FALL TERM.	WINTER TERM.	SPRING TERM.
English Readings. 4(4-0)	Grammar and Composition. 4(4-0)	El. Composition I. 4(4-0)
Vocational Arithmetic. 4(4-0)	Vocational Algebra. 4(4-0)	Applied Geometry. 4(4-0)
Free-hand Drawing. 4(1-4)	Object Drawing. 4(1-4)	Geometrical Drawing. 4(1-4)
Woodwork.† 4(1-4)	Painting.† 4(1-2)	Blacksmithing.† 4(1-2)
Vocational Guidance. 4(1-4)	Vocational Guidance. 4(1-4)	Trade Practice.† 4(9-8)
Physical Training. Band or Orchestra.*	Physical Training. Band or Orchestra.*	Physical Training. Band or Orchestra.*

SECOND YEAR.

English Classics. 4(4-0)	El. Composition II. 4(4-0)	El. Rhetoric. 4(4-0)
Shop Mathematics I. 4(4-0)	Shop Mathematics II 4(4-0)	Shop Mathematics III. 4(4-0)
El. English History. 4(4-0)	American History. 4(4-0)	Civics. 4(4-0)
Shop Drawing. 3(1-4)	Shop Drawing. 3(1-4)	Shop Drawing. 3(1-4)
Trade Practice.† 5(9-12)	Trade Practice.† 5(9-12)	Trade Practice.† 5(9-12)
Physical Training. Band or Orchestra.*	Physical Training. Band or Orchestra.*	Physical Training. Band or Orchestra.*

THIRD YEAR.

El. Economics. 4(4-0)	Industrial History. 4(4-0)	Industrial English. 4(4-0)
Materials and Construction. 4(4-0)	Trade Calculations. 4(4-0)	Labor Problems. 4(4-0)
Mechanical Physics I. 4(3-2)	Mechanical Physics II. 4(3-2)	Mechanical Physics III. 4(3-2)
Trade Practice.† 8(9-16)	Trade Practice.† 8(9-16)	Trade Practice.† 8(9-16)
Physical Training. Band or Orchestra.*	Physical Training. Band or Orchestra.*	Physical Training. Band or Orchestra.*

*Elective.

†Trade practice periods are given in units of four hours each, or one-half of a school work day.

Trade practice may be elected from any one of the following trades:

Blacksmithing.	Painting.
Carpentry.	Plumbing and Steam-fitting.
Masonry, including,	Printing.
Cement and Concrete Construction.	Steam Engines and Boilers.

Course in Home Economics.

(NOTE.—The numeral immediately following the name of a subject indicates the number of credits, and those in parenthesis the hours per week of recitation, laboratory and vocational practice, respectively.)

FIRST YEAR.

FALL TERM.	WINTER TERM.	SPRING TERM.
English Readings. 4(4-0)	Grammar and Composition. 4(4-0)	El. Composition I. 4(4-0)
Vocational Arithmetic. 4(4-0)	Vocational Algebra. 4(4-0)	Applied Geometry. 4(4-0)
Physiology and Hygiene. 4(4-0)	Household Insects and Home Sanitation. 4(4-0)	Home Nursing and Care of Children. 4(2-4)
Color and Design.† 4(0-6)	Color and Design.† 4(0-6)	Applied Design.† 4(0-6)
Cooking and Sewing I.† 4(0-12)	Cooking and Sewing II.† 4(0-12)	Cooking and Sewing III.† 4(0-12)
Physical Training. Music.*	Physical Training. Music.*	Physical Training. Music.*

SECOND YEAR.

Eng. Classics I. 4(4-0)	El. Composition II. 4(4-0)	El. Rhetoric. 4(4-0)
El. Eng. History. 4(4-0)	American History. 4(4-0)	Civics. 4(4-0)
Household Chemistry I. 4(3-2)	Household Chemistry II. 4(3-2)	Household Chemistry III. 4(3-2)
Dyeing and Weaving I. 2(2-2)	Dyeing and Weaving II. 2(2-2)	Home Gardening.† 2(2-4)
Home Cooking I.† 3(0-8)	Home Cooking II.† 3(0-8)	Home Cooking III.† 3(0-8)
Shirt Waist Suit.† 3(0-8)	Dressmaking.† 3(0-8)	Home Laundering.† 3(1-4)
Physical Training. Music.*	Physical Training. Music.*	Physical Training. Music.*

THIRD YEAR.

Household English. 4(4-0)	Practice Writing. 4(4-0)	Eng. Classics II. 4(4-0)
Household Physics I. 4(3-2)	Household Physics. 4(3-2)	Household Physics. 4(3-2)
Social Science. 4(4-0)	Child welfare and Motherhood. 4(3-2)	Household Accounts and Home Management.† 4(3-2)
Manual Training. 2(1-4)	Manual Training. 2(1-4)	Poultry Raising. 2(2-2)
Home Dairying.† 2(0-4)	Home Arrangement and Decoration.† 2(0-4)	Home Millinery.† 2(0-4)
Textiles. 2(2-0)	Art Needlework.† 2(0-4)	Advanced Dressmaking.† 2(0-4)
Physical Training. Music.*	Physical Training. Music.*	Physical Training. Music.*

*Elective.

†Vocational practice periods are given in units of 4 hours each, one-half of a school work day. Practical instruction in these subjects is given in the Domestic Science and the Domestic Art Departments and in the Home Cottage.

Preparatory Course in Hospital Nursing.

Requirements for Admission to this Course.

Indian young women who are regularly enrolled students of the school, at least 18 years of age, physically strong and possessing the proper personality and temperament and who have completed the 8th grade may be admitted to this course without examination. Students who have not completed the 8th grade may be admitted upon passing a satisfactory examination in reading, writing, spelling, arithmetic, geography, United States history and physiology. Maturity of age, practical experience, personality and temperament will be duly considered in determining the student's qualification for admission.

Students who complete this preparatory course will be given assistance in securing admission into the large city hospitals in nearby cities, where they may earn their own way and complete the full course. Such students will be carried as "Outing Students," and will have the influence of the school to assist them in securing positions after graduation. This course offers excellent opportunities to Indian young women of proper physical and temperamental fitness who are ambitious to prepare themselves for a useful life's work among their people.

FALL TERM.

Lesson outlining the work: responsibilities of the Nurse, qualifications, duties, ethics, etc.

The sick room in general: making of medical and surgical beds, moving of patients, the toilet of the sick, etc.

Charting: comprising a study of the pulse, temperature, respiration, etc.

The hygiene of the sick room: room temperature, ventilation, disposal of excreta, etc.

Sick room diet: recipes, preparation of food, methods of feeding, etc.

Baths: cleansing baths, sponge baths, tub baths, and foot baths, packs, etc.

External and local applications: counter-irritants, liniments, plasters, fomentations, poultices, etc.

Medical and surgical measures: enema, douches, lavage, gavage, catheterization, etc.

WINTER TERM.

Antiseptics and disinfectants: methods of sick room disinfection, disinfection of clothing, excreta, etc.

Asepsis and antisepsis: a study of modern operating room methods, sterilization of gowns, dressings and instruments, care of hands, etc.

Medicines: methods of use, dosage, weights and measures, etc.

Bandaging.

Accidents and emergencies.

SPRING TERM.

Nursing of special cases.

Surgical nursing.

Materia Medica for nurses.

Principles of obstetric nursing.

Special instructions applicable to the Indian nurse regarding work among her people.

Practical work continues throughout the day and comprises service in the dispensaries in the Boys and Girls Quarters, in the hospital dispensary, in the wards of the hospital and as occasion demands in the operating room. The work is so arranged as to give each student nurse experience in all departments of the school hospital.





THE movement for industrial education is a part of a great educational advance which extends over the whole civilized world. It results from the attempt to bring about universal and appropriate education. It frankly recognizes that all cannot have and do not need the same education. It means the complete and appropriate education of industrial workers of whatever grade. It therefore means much more than the introduction of shopwork into the present curriculum. It means a thorough revision of our school system with the purpose of furnishing for the working classes an education which bears somewhat the same relation to their prospective life work as does the college education to the future work of the professional and managerial classes. It means that, at whatever grade it may be introduced, it will be a type of secondary education, and will presuppose a basis of general cultural training and provide for considerable variety in both the length and breadth of the general superstructure. It means reality. Industrial education, therefore provides participation in, rather than fancied preparation for, some activity.

FRANK MITCHELL LEAVITT
ASSOCIATE PROFESSOR OF INDUSTRIAL EDUCATION
IN THE UNIVERSITY OF CHICAGO



OPERATING ROOM—CARLISLE INDIAN SCHOOL HOSPITAL



DRESSING ROOM DOMESTIC ART DEPARTMENT

Detailed Description of Courses.

Academic Work.

VOCATIONAL ARITHMETIC.

This work is not a review of formal arithmetic. It aims to apply the fundamentals of arithmetic to the specific problems of the farmer, mechanic and housewife. It includes such work as estimating lumber and material for small buildings, measuring lands, contents of silos, estimating materials for cement structures, labor cost accounts, computing rations, estimating butter fat from milk tests, computing interest, taxes, tax rates, etc. Boys and girls take this work together. At times there are differences made in the problems to be solved by boys and those to be solved by girls. It is kept continually in mind that this is an applied or vocational course, and that the primary purpose is not to teach arithmetical principles, but to give training and practice in the application of those principles to the solution of vocational problems. Whenever possible, problems are taken from work that is being done about the school, e. g., estimating lumber needed for repairs, or paint needed for a building, or amount of hay and grain and silage which will be needed for the farm stock, and other problems of like character.

VOCATIONAL ALGEBRA.

The boys and girls take this work together. The same general principles are observed here as in teaching the arithmetic course. The aim is to teach that work most essential to the pupil in his other work and the vocations. This course emphasizes the algebra most essential to the understanding of physics and chemistry and the proper use of formulae in vocational work. Chief emphasis is placed on elementary processes, the equation, fractions and graphs. The graph is coming to be so commonly used that all pupils should be acquainted with it.

APPLIED GEOMETRY.

The same principles apply to the teaching of geometry as to arithmetic. Here are emphasized those propositions or theorems which have most general application in physics, and farm and shop work. Just as largely as possible, there is some practical

application of each theorem as it is taught. Thus the relation of the hypotenuse and legs of the right-angled triangle are applied to squaring foundations, plumbing posts or buildings, cutting rafters, getting lengths of roof boards, etc. Such an application of these principles make them a definite part of the pupil's equipment for future work.

ENGLISH.

This outline of the courses in English applies to all of the work in English for all of the vocational courses. The purposes of English in vocational courses are (1) as a means for leisure occupation and general culture, (2) for utilitarian value. While the first of these purposes is not minimized, it must be remembered that it will function only to a limited extent in the lives of most persons actively engaged in a trade, manufacturing and agriculture or home making. It is a pretty well established fact too that the use of English, either reading or writing, as leisure occupation usually results from interests aroused later in life, rather than from school training and experience. Considering the foregoing and remembering that the time available for additional training in English is very limited, the importance of applied vocational English in these courses cannot be overestimated. In a utilitarian way it will function both as a means of business intercourse and information, and in training for the duties of citizenship. On that account practically the entire emphasis of the English work is placed on the second of these purposes. There is a definite aim to modify and to teach the English of these courses so that it may most directly apply to and assist the vocational work now, and later have a distinct value for vocational and civic purposes. This includes (1) an acquaintance with vocational and civic literature, trade magazines, agricultural papers, women's magazines and papers, and the current magazines dealing with public questions; (2) acquiring the vocabulary of the trade or vocation; (3) drill in the use of the vocabulary, i.e., effectively expressing ideas concerning one's work or public questions.

The selections read by the pupils in these courses are not the usual classics selected for their literary value, but the readings are made up largely of well written articles dealing with vocational or civic problems. The teachers use the magazines, papers, texts, and literature of the trades, of agriculture and of home economics, as the source of most of the readings.

The composition work is based largely on the same material. Whenever possible, both the reading and the composition work are correlated with the work in other classes. This is done by readings chosen to supplement the trade, domestic or agricultural courses being studied by the pupil and by writing compositions, articles or letters, based on the work of the same class.

FARM WRITING.

This course in the third year is given largely to writing contracts, labor agreements, mortgages, deeds, titles, and other legal forms. This is essentially a term's work in business and commercial English for the farmer. It aims to fit him to properly conduct his own business so far as written instruments are concerned, and protect himself from poorly written contracts, etc. The work includes some common legal usages, and a full understanding and import of the legal forms studied.

INDUSTRIAL ENGLISH.

The reading matter for this course aims to give the students taking industrial work definite information about labor organizations, relations of employers and employees, labor legislation and regulations, employers' liabilities, shop sanitation. The written work consists of contracts, agreements, rent agreements, resolutions, letters of inquiry concerning work, etc. This matter is presented as an English course, because the aim is rather to train for intelligent reading of such material than to implant definite ideas and opinions in the minds of the pupils. The material for this course is based partly upon books but largely upon current literature.

HOUSEHOLD ENGLISH.

The aim of this course is to train girls to use current literature and especially women's magazines, as a means of self culture and improvement, especially in home management, motherhood and child training, and social duties. The work is grouped around topics for study and there are class readings and discussions, oral reports, written papers, etc. In short, the class is a miniature women's club and might well be organized as such. The topics for the course are suggested by the school physician, school nurse, domestic science and domestic art teachers, and the

school matrons. Practice Writing and English Classics II (Home Economics Course) aim largely at cultural training and training for leisure occupation for the girls. These are varied to suit the needs and desires of individual classes. In the classics work, some time is devoted to a study of children's books and readings, so that the girls may apply this information as future teachers or mothers.

In the Practice Writing work, practice is given in writing a secretary's report or minutes of a meeting, writing a report of a meeting for a local paper, preparing sets of resolutions for various occasions, writing petitions, etc. Some time is given to training for social correspondence, writing formal notes, invitations, acceptances, etc. With this is given short talks on customary usages.

ENGLISH AND AMERICAN HISTORY AND CIVICS.

This work aims definitely at training for citizenship. The English History is necessarily very elementary, but it aims to give some slight acquaintance with our social, civic and economic institutions, and to aid to a proper understanding of American History. The work in American History is not a mere repetition of American political history chiefly, but emphasis is placed upon the social, economic and agricultural elements.

The work in Civics is especially broad. There is given much of social and civic relationships and duties, especially those related to the home community. There is less of formal study of the state and national constitutions, and more of the actual workings of organized social bodies.

INDUSTRIAL HISTORY.

It is important that young men who are to enter the trades and skilled industries have a considerable knowledge and understanding of the industrial development of the United States. This is not secured from the ordinary course in American History. Therefore, this course deals specifically with the industrial and commercial development and progress of the nation. As much of commercial and industrial geography as possible is taught in connection with this course. Care is taken that the emphasis be kept on industrial history. The economic conditions, labor problems, etc., are thoroughly studied.

RURAL ECONOMICS.

The general principles of economics as applied to agriculture is a part of the equipment of every farmer, both for his duties as a farmer business man, and as a citizen. The work includes a study of the relations of farming to other forms of productive work, of the relations of capital and labor and land as factors of production, of the investment of capital and labor and proper returns, of ownership and systems of land rental and tenure, and of systems of agriculture and agricultural production. Special attention is given to agricultural organizations, social and business, co-operative marketing and buying, life and property insurance in mutual and old line companies, benefit societies and fraternal organizations, building and loan associations, savings banks, land companies, loan and mortgage systems. Special attention is given to commercial organizations of modern times with which the farmer has to deal, especially systems of grain and livestock marketing, commission system of handling vegetables and produce, banking, etc. Some attention is also given to social features of farm life and the farmer's relations to public enterprises. All this is applied and practical rather than such scientific work as is usually given.

SOCIAL SCIENCE.

Each girl should get some definite instruction concerning the interrelations of the individual and family, and the various organizations of society, not only state and national, but especially the community and independent organizations. The course deals with both sociology and economics in a general way.

Discussions center about relations of the family and the individual, especially the mother, to general community welfare; morality and refinement in the community; social life of the community; the school and school influences; child welfare and recreation; character building influences in the community; churches and auxiliary organizations; mothers' clubs; domestic science clubs; fraternal organizations and women's auxiliaries; thrift and savings and investment schemes and their value; relation of economic independence and cultural opportunities; importance of character, honesty and reputation, together with industry, intelligent study of one's work and frugality for success in life.

There are some discussions from time to time of such topics as crime, leisure, education, charity, health conditions, illiteracy, poverty, immigration, etc., but this is limited to such an amount as will be helpful. No attempt is made to pursue a scientific study of such topics.

In all this work, due account is taken of race differences and characteristics. This includes considerations affecting mental, moral, social and religious organizations, differences of health conditions, birth and death rate, economic conditions, literacy, crime, and relations with other races, etc.

In every possible way the course aims to apply to and assist in the solution of the various social and economic problems, as they exist in the life of the Indian and especially on the various reservations.

ELEMENTARY ECONOMICS.

This course emphasizes the industrial and commercial field just as the course in Rural Economics is applied to the field of agriculture. It is a general elementary introduction to economics, dealing with the factors of production and consumption, relations of labor and capital, principles controlling commerce and industry, laws of supply and demand, banking, currency.

Aside from its general cultural value and training for citizenship, the course aims to function in a positive way in the industrial and economic life of the future wage earner. This course lays the foundation for the work in Industrial History, Industrial English, and Labor Problems, which follow it.

LABOR PROBLEMS.

This work endeavors to deal more specifically with the industrial and economic problems confronting the laboring man. There is a careful study of labor conditions, labor legislation, housing conditions, factory or shop sanitation, and safety devices, employers' liability acts, pension systems, fraternal and other insurance, labor organizations, apprenticeship systems, contracts with employers, employment agencies, problems of the unemployed, etc. The course aims to give the prospective workmen as intimate an acquaintance with conditions in the industrial world as it is possible to give him in the class-room and library. This work is closely correlated with the work in Industrial English.

ELEMENTARY BOTANY.

The purpose of this work is to give the pupil such a working knowledge of the processes and requirements of plant growth as will enable him to properly understand and later intelligently apply what he is to learn concerning crop production. For those boys who have finished the eighth grade in schools where agriculture is not taught, this must be an introductory course, while for the boys who may have had elementary agriculture in the grades at Carlisle or elsewhere, it will be a rapid review and advanced course. The work is taught with the applied aim clearly in mind. It is not the general course in scientific botany. Wherever possible, the materials and illustrations are the economic plants of the farm, both weeds and crops.

The course includes flowers, fertilization, and seed production. (Foundation work for plant improvement, mixing of plants, etc.) How plants secure and manufacture foods, soil moisture and light relations, and kinds of food manufactured. (This bears definitely on soil management for growing crops, moisture control, thickness of planting, depth of cultivation, destruction of weeds, etc.) Plant structure and food storage. (This enables the student to understand the study of feeds and their digestibility and nutritive value, time and methods of cutting and caring for forage crops, and lays the foundation for such work on trees as pruning, grafting and budding, etc.) The pupil must get an idea of annuals, biennials and perennials, of tree growth, budding and fruitbearing, etc.

Some work is given on fungus plants, bacteria, and plant diseases. Specimens are secured and the school physician, during successive laboratory periods, makes cultures of some common bacteria to show something of their growth and prepares stained mounts for demonstration to the class. This course connects very definitely with the work in Seed and Soil Study. Indeed the study of seeds and the relation of the plant to the soil is given but little time until the second term work. The two courses are taught almost as one continuous course.

ELEMENTARY ZOOLOGY.

The course in zoology is necessarily very limited. On that account but a very few lessons are given to divisions and relation-

ships in the animal kingdom. The major portion of the time is given to parasitism, including sporozoa causing disease, and the distribution of parasites, to the important orders of insects, their methods of reproduction, life cycle and feeding habits, and to the mammals and birds. The other classes of animals are given very little attention and the birds are studied only for comparison of their reproductive processes and digestive system with that of the mammals. In studying the mammals, special emphasis is placed on physiology and anatomy of digestion and on reproduction, also on sanitation. The work on digestion, nutrition, etc., may be made comparative physiology. This work on mammals lays the foundation for the courses on stockfeeding and on breeds and breeding.

CHEMISTRY.

This is as largely as possible an applied or vocational course. Wherever possible, the illustrations and laboratory work are drawn from processes familiar to the pupils through their daily experiences. Very little time is given to the rarer and less important (industrially) elements usually discussed in chemistry courses. The time thus freed is used in studying chemistry as applied to industries, agriculture, and home economics. Illustrations of such applications are softening of water, refining of various kinds of iron, and making steel, burning lime, soils and fertilizers, applications to feeds and feeding, milk and butter, cement manufacture and uses, making silage, etc. This requires that more attention be given to organic chemistry than is usually customary, but it is justified on account of its application to agriculture and home economics.

The pupils in all three courses are taught together. The applications made to the different kinds of work are interesting and helpful to all the students alike. Laboratory work is given regularly and formally.

PHYSICS.

The work in physics is taught so as to apply just as largely as possible to the problems of agriculture. The mathematical and more purely scientific side receive little emphasis, and stress is placed on practical applications. For example, little emphasis is given to laws of falling bodies and some of the more abstract principles of the physics of light and sound, but the laws of ma-

chines, of liquids as applied to pumps and waterworks and plumbing systems, are emphasized. Illustrations of practical applications of physics to agriculture are: Centrifugal force to the cream separator; momentum to fly wheels; latent heat to ice-chests, fireless cookers, ice cream freezers, etc., laws of capillarity to soil moisture. These and other like applications make the course function in the life of the farmer.

Wherever possible, the work in electricity is given a practical bearing, such as installing door bells, simple rural telephones, principles of electric wiring, etc.

This course is taken by boys in the course in agriculture and mechanic arts, and girls in home economics together. This necessitates some special applications to those courses as well. But in general, applications are chosen which apply to all three courses and such applications are much more likely to come within the range of experience of all the pupils.

Special laboratory exercises are devised for the girls when that seems desirable. For example, the exercises on machines is made to apply to the sewing machine, wringer and tools used by women rather than by men. The laboratory work is made as practical as possible rather than scientific. It includes some work in accurate measurement and weighing.

FREE-HAND DRAWING.

This is a general introductory course in free-hand drawing, aiming to give skill and facility in execution, a knowledge of perspective, use of lines, etc. It is given as a preparatory course, keeping in mind that the student is to do mechanic arts work. Some work in ornamental drawing and designs may be done at the discretion of the teacher.

OBJECT DRAWING.

This course is in the main a continuation of the preceding, except that in this course all the work is based on training to faithfully represent objects. Rapidity, clearness and accuracy is emphasized. As largely as possible, pupils practice sketching tools, parts of machines, castings, etc. When a boy has completed this work he is able to sketch quickly a casting, or part of a machine, so accurately and clearly that after he has taken the necessary measurements and recorded them on the drawing, the whole

might be sent to the shop drafting room and a working drawing made from the sketch and data.

GEOMETRICAL DRAWING.

This is purely an introductory course which is to prepare for the courses in shop drawing. Practice is given in lettering, laying out work, use of T-square, triangles, compasses, and other drawing instruments, or use of lines, methods of layout, inking, various kinds of drawing, etc. Some exercises on working drawings are given. At the end of the course the student should be ready to do the work in shop drawing with comparative skill and accuracy.





Agricultural Work.

First Year.

SEED AND SOIL STUDY.

The study of seeds and the soil are carried along together as the interest of the class and their practical work on the farm demand.

The seed is studied as food for man and animals as well as the plant's method of reproduction. Also seed storage and viability, size of seed and depth of planting, stratification, seed selection and testing, adulteration of seeds, etc., are studied. Seeds to be planted on the farm and in the garden are tested by the class, and if possible samples are tested before the seed is purchased, and pupils study prices and values of seeds needed on the farms. Pupils work enough with the seeds of crops and important weeds to enable them to recognize most of them. Drawing and describing the seeds helps to fix their characteristics in the minds of the pupils. Some judging of corn and wheat is done in order that pupils get a definite idea of the important types of corn, wheat and sorghums. The pupils learn to identify any plants which they do not already know while they are studying the seeds of these plants. This seed study requires considerable laboratory work, which is done in the laboratory and in the propagating house.

The work in soils includes origin with special attention to humus content, types of soils and characteristics, soil moisture, its movements, control, etc., soil temperature, plant food in the soil, manures and fertilizers (very briefly), the plant and the soil (relations of both roots and seeds), tillage and soil manage-

ment. Special attention is paid to managing soil so as to prevent washing and blowing, to maintain fertility and physical condition of tilth. In connection with the seed work, special attention is given to seed bed preparation. Some laboratory work and practice is given by having the pupils assist the school florist to prepare soils, to pot plants in the greenhouse, and do the early work in connection with the hotbeds and preparation for the garden.

The time available limits this course to a very brief study of soils, so it is made as intensive and applied as possible. Soil samples and apparatus are available for some laboratory exercises.

GARDENING.

This work is definitely connected with the foregoing. The work of seed selection and planting and the selection of a site and preparation of the soil are merely an application of the principles learned during the winter term. The pupils study varieties of garden vegetables, both from texts and from seed catalogues. They plan a farm garden for a succession of table vegetables, giving dates of planting, etc. They select varieties and make an order for seed, exactly as they would do if they were on their own farm. Lessons are given on hotbed construction and management, on transplanting, arranging the garden for tool cultivation, etc. General tillage operations, fertilizing, and the control of insects and plant diseases are also given. The study of the different garden vegetables is connected as closely as possible with the planting of those vegetables in the school garden. Some lessons and practice are given on preparing vegetables for market and in storing vegetables for winter use.

Gardening (Home Economics Course) follows much the same outline as that for the boys, except that less attention is given to soils and tillage. The girls study varieties of vegetables, make orders for seeds, plan gardens, etc., just as the boys do. The girls have some practice in managing a small section of the hotbed, transplanting and doing some of the general garden work. This practice is given in the garden located on the school ground, by detailing the girls for that work on special afternoons. Each girl spends three or four afternoons, at least, in the garden.

STOCK JUDGING.

This work and the formal recitation on farm machinery, which is taken at the same time, is given on that forenoon when recitations are not held in the other subjects which first year students are taking. The term's work is given to the study of horses and hogs. These are studied and judged from the standpoint of market type and classes rather than breeds. The work on horses includes a knowledge of the parts of a horse, how to tell the age of a horse, unsoundnesses, etc. Emphasis is placed on draft horses. There is some classroom work, but much of the work is discussion and judging of the horses used on the school farm and grounds. Whenever possible, arrangements are made to visit the best horses in and about Carlisle and to judge them. The class will visit whatever fairs may be accessible, and, with the instructor, judge, score and place the stock exhibited.

POULTRY RAISING.

The term's work covers breeds of poultry, housing, feeding, incubating and brooding, caring for young poultry, caring for and marketing of poultry products. All of this work is presented from the standpoint of the farm flock and not the poultry farm. The work on housing poultry is definitely correlated with work in drawing and farm carpentry (spring term), so that some of that work may be applied, *e. g.*, each student draws a plan for a small poultry house, and makes out a bill for materials and brief specifications. Each one has working drawings of feed hoppers, nests, watering devices, etc., made by himself and when he leaves the school he may take them with him as his own property. The work in feeding is the first work students will have on preparing rations and feeding for definite purposes—egg production, growing chicks, etc.—so it is presented carefully. Samples of the various feeds, grit, shells, etc., will be in the laboratory, so that pupils may become acquainted with them. Practice comes through caring for poultry at the school. Plans are now under way for keeping a flock on the school campus. If possible, this flock will be divided into two or three units, so that different details of boys may care for each unit or colony house, and so all get practice in all departments of the work.

Incubators are provided, and the boys get experience in all the details of operating them. Brooders and cheap brooding houses are made by the boys taking shop and carpentry work. These, too, are operated by the boys. Some practice is given in raising chickens in the natural way—that is, by setting hens and allowing them to brood the chicks. Students are taught how to clean and keep the houses and yards sanitary, to provide proper food and clean water, and to care for eggs so as to have a good product to market. Exercises in candling eggs are given. For this work, cheap devices, practical for the farm home, are used. Practice with the incubator and brooder and caring for young chicks, eggs, etc., will be continued throughout the year until the next class is ready to take charge of the work.

POULTRY RAISING (HOME ECONOMICS COURSE).

The class work for boys and girls is given together with the exception of a recitation on breeding, flock management to produce sterile eggs, etc. The practical work for the girls includes all phases of the work, except the heavier and dirtier kinds of work. They do some feeding, watering, candling, incubating, and brooding work. Girls are given special instruction on caring for setting hens and young chickens.

FARM PRACTICE—FARM MACHINERY—FARM BLACKSMITHING—
FARM CARPENTRY.

While the emphasis is placed on this work during the first year, it is continued throughout the three years. Formal instruction is given largely during the first year and during the term in which the name of the work appears in the course, yet some instruction is given at other times. For instance, the study and operation of the ensilage cutter must be given to second year boys as well as first year boys, since the second year boys will be doing the practical work with the cutter. More formal classroom work is given than is indicated in the course of study. It is given at the time when it is most needed in connection with the practical farm work.

The teacher of agriculture, the farmer, blacksmith, carpenter, and other instructors have a part in giving the instruction. Special periods are set aside for instruction as there may be a need for it.

Instruction in farm machinery includes a study of the different kinds and makes of farm tools. The fitness of different kinds of tools and devices for various purposes and conditions is discussed. The work is not limited to tools used on the school farm, but these are taken as a basis for comparison. Catalogues of the various factories are used to advantage in this work. A study is made of tilling, planting, harvesting and other machinery. There is some instruction and practice in operating gas engines.

The formal instruction includes the regular instruction concerning the fire, handling different kinds of iron and steel, etc., but it is put on the farm rather than the shop basis. Boys make out a list, with prices of a minimum equipment for a farm shop. Boys taking this work have charge of putting the tools on the farms in proper condition for the spring and summer work. This affords opportunity for additional study of farm machinery.

The work in farm carpentry emphasizes the kind of wood-work the farmer will be required to do; repair of machinery, fences and buildings, making gates, wagon boxes, single-trees, eveners, window screens, barn doors, mangers, feed boxes, hog troughs, feed hoppers, etc. Some time is given to planning and constructing small farm buildings, such as chicken houses and coops, hog houses, sheds for stock, etc. Formal instruction is given to teach boys to select and care for tools, sharpen saws, planes, chisels, etc., and to selecting proper lumber for special uses, as well as to make the best use of stock supplied to them, to purchasing proper nails and other hardware for particular jobs. They get some training in estimating bills of material for small jobs, etc. As largely as possible, this is connected with definite working plans which the pupils work out in the drawing department. At some time during the time of the student's attendance at Carlisle, some instruction is given in rope-tying and splicing, harness mending, cement work, painting, etc.

Second Year.

GRAIN CROPS.

Work in grain crops includes work on all the important cereal crops and the grain sorghums. The work includes a study of characters, peculiarities of growth, soil relations, planting, tillage, harvesting and marketing. Through the use of farm bulletins

in this and the course on forage crops, each student is called upon to report on special methods for the state or region in which his land lies. He should also know of the value of the different crops in his locality and of the types or varieties most suitable for planting there. As largely as possible, these reports are in written form and are to be preserved by the student for reference when he returns to his farm. Special attention is given to the fundamental operations in this work, *e. g.*, time of planting as related to soil and moisture conditions and to climate; preparation of soil; depth, frequency and time of intertillage; management of soil after crop is removed, etc. It must be borne in mind that except for the experience at the school and under the outing system, boys taking this work will be dealing with strange work. Since they will probably have had little to do with the planning of work on the school farm or at their outing home, they will have given but little thought to reasons for doing things and to planning work, therefore, the teacher does not assume that the important practical operations can be hurried over and emphasis placed on the scientific side. There is a definite attempt to review and apply their knowledge of farm machinery.

The fact that practice cannot be a definite part of the work while this course is taken, is not a severe handicap, because the practice obtained in other courses and during the spring and summer will overcome the lack here. There is definite instruction concerning seed selection and crop improvement. In connection with the ensilage of the crops, a careful study is made of silos, silo machinery, silage crops, and the making of silage. Later this work is briefly reviewed in the study of feeds and feeding.

Some practical work is afforded by the fall seeding, and this is done by members of this class.

FORAGE CROPS.

Under this head a careful study of the characteristics and production of the various important forage crops is made. Attention is also given to their place in the economy of farm management, *i. e.*, systems of rotations, soil fertility, prevention of erosion, and livestock production. The leading forage crops for the various sections of the United States receive chief emphasis,

while those grown in smaller areas or of less importance are treated very briefly. The legumes receive special emphasis from the standpoint of family characteristics, nitrogen fixation, feeding value, and relation to soil fertility. Brief attention is given to making pastures and meadows, and the making, storing and marketing of hay.

Much of the practical work connected with this course is done during the spring and summer, but while taking the work in class the boys clean and test seed for the farm, estimate the seed needed for fields on the farm, plan the manuring, tilling, etc., of the fields, and in connection with this and their feeding work, learn to plan the acreage of forage crops probably necessary to maintain the livestock of the school and the farms.

There is a review practice in recognition of seeds and plants, so that no boy leaves this work unable to recognize the more common and important forage crops.

FRUIT GROWING.

The course in fruit growing includes brief work on the following and other topics—selection of a site; preparation of ground for planting; selecting varieties of trees; ordering, receiving, and caring for trees; planting (special emphasis); care of trees, tillage, intercropping, etc; pruning young and old trees; spraying and insect control; marketing; grafting; budding; making cuttings, etc. A few lessons are given to the bush fruits and to strawberries.

Laboratory practice is given in budding, grafting, making grafting wax, mixing sprays, etc. The practice in making cuttings is given in the practical work in the greenhouse.

There is a close correlation between the control of insects and disease, making sprays, etc., and the work on farm insects and the work in chemistry. The English class gives practice in writing orders for trees, spray materials, boxes and supplies, finding prospective buyers, notice of shipments, etc.

STOCK JUDGING II.

The work in Stock Judging II does for cattle and sheep just what Stock Judging I does for horses and hogs. Whenever there is an opportunity to see some exceptionally good stock, both classes are taken to judge it, regardless of whether it is stock

coming in the first or second year's work. This makes it possible for the classes to visit fairs together and work on all the stock.

The work is based on Market Types and Classes rather than breeds, though the breeds are referred to. Much more time is given to beef and to dairy cattle than to sheep. Pupils get a definite idea of the purposes of each type, and of the classes of cattle, and learn to judge them rather quickly and accurately. There is considerable classroom or lecture and study work along with the judging exercises. Selection of the proper type for the purpose is emphasized. The pupils must understand that market demands and the ability of the animal to produce are the determining factors in live stock production.

FEEDS AND FEEDING.

This is a general introductory course, dealing in an elementary way with animal nutrition, feeds, and their nutritive value, relation of grade of feed to feeding value, food demands of different kinds of stock for maintenance, growth, work and production, balancing rations for special purposes, etc. Special emphasis is given to the value and proper use of silage and to the work on soil construction and silage making. The nutritive value and digestibility of feeds is taught, so as to show the value of farm manures as fertilizers.

On account of the opportunity to apply it in practice, special attention is given to the proper use of feeds available on the school farm, yet feeds more widely grown and used in the Western United States are not neglected. Practical work will be the feeding and care of the horses and hogs on the farm and at the school.

The special work on dairy cattle and hogs and beef cattle will be taken in the third year, therefore these topics are here taught in an elementary way only.

FARM INSECTS.

The study of farm insects includes those insects most common and most injurious to farm, orchard and garden crops. The course is not very extensive, therefore only a few of the more destructive insects are studied and from these generalizations are made. The life history and habits of each insect are studied and methods of

controlling or combatting learned. Special emphasis is placed on crop rotation, soil management, and time of planting as methods of control. Among those which receive special attention are the chinch bug, Hessian fly, potato bug, corn ear worm, codling moth, cankerworms, corn root worms, cut worms, grasshoppers, plant lice, etc. This work is not too technical. Just enough of anatomy and life history are taught to make sure that the student can intelligently apply methods of combatting and controlling the insects.

Practical application of this work is secured by correlating it with the farm, orchard and garden work.

Third Year.

BREEDS AND BREEDING.

The livestock work of the first two years is general and fundamental. The third year's work is more specialized as well as more advanced. In this term's work, a careful study is made of all breeds of livestock commonly found on farms. Only a little work is given to dairy breeds, since these breeds are to be studied next term. The origin and characters of the breeds are studied along with their peculiar fitness for special purposes or conditions. As often as possible, students are given an opportunity to see representatives of the breeds they are studying. On such occasions an exercise in judging from the standpoint of breeds is given.

A considerable portion of the term is given to a study of the elementary principles of breeding. Students should understand the meaning of pedigree and registration, crossing and grading, and should get the principles and practices underlying breeding for the production of better stock. This work is necessarily classroom work. It builds on the previous work in stockjudging and elementary zoology.

DAIRYING.

This work includes a brief story of the dairy breeds and their special fitness for peculiar conditions and purposes. Dairy cattle management and feeding occupies the major portion of the time. A little attention is given to equipment for keeping dairy cows on the farm. The principles underlying the production of clean,

pure milk are studied and pupils learn something of the handling and marketing of dairy products.

This work is definitely connected with the care and feeding of the dairy herd. Special emphasis and attention are given to the problem of feeding. This is not confined to winter feeding alone, but to feeding for milk production throughout the year. The instruction is on the basis of dairy work on the general farm and not special dairy work. The probabilities are that the majority of Indian students will use this work only as a part of diversified farming.

Formal laboratory work consists of milk testing, buttermaking, dairy records, separating, etc.

LIVE STOCK PRODUCTION.

Live stock of some kind should be and is found on nearly every farm, but there are many phases or parts of the live stock business and each part is becoming more and more specialized. Therefore, before the student completes his work, but after he has some knowledge of feeding and breeding, of breed characters, and market demands, he should learn something quite definite of the most approved practices of men engaged in the separate phases of the livestock industry.

A study is made of the following: Special attention to business management, feeding and general care; the work of the breeder, the producer of pure bred stock which is to be sold to other stock men for breeding purposes; the work of the producer, the man who grows cattle, horses and hogs especially, but does not finish them for slaughter, that is sells them as stockers or feeders to be finished by other persons. This applies chiefly to horses, sheep and beef cattle, and little or not at all to hogs and dairy cattle. It is most important in the beef cattle industry. In this connection, the grazing industry, that is the work of the man who buys stockers to pasture and put in condition to be sold as feeders, is studied. And finally, a study is made of the methods and practices employed by the feeder, the man who usually buys stock to finish for the market, that is, fits them for slaughter. This will apply particularly to beef cattle and sheep.

In this work, special attention is given to the conditions, size of farm, climatic conditions, kinds of crops grown, nearness to market, etc., which make one or another phase of this work most

profitable and practicable. The fitness of the individual for a particular kind of livestock work, the capital available, etc., are not left out of consideration.

This course is presented so as to apply to widely varying conditions. It reviews, summarizes and applies practically all of the preceding work on livestock.

HANDLING AND CURING MEATS.

Practice in this work is given in the fall as well as the winter term. Practice in curing is given during the winter term only. The work of instruction is given as informal lectures while the work of slaughtering is going on. Students learn to butcher, clean and dress hogs, and, if possible, sheep and beef animals. Practice is given in cutting up the carcass, trimming the parts, rendering lard, making sausage, etc. In the winter term, instruction and practice are given in curing, smoking and caring for meats.

This work is presented on the farm basis. Students are taught to use such materials and devices as are likely to be available in a country community.

DISEASES OF FARM ANIMALS.

The study of common diseases of farm animals and their distribution, together with methods of combatting them and of proper livestock sanitation, make the content of this course. Some time is given to methods of combatting parasitic insects as well. Poultry diseases and parasites are included. The emphasis is placed on methods of securing and maintaining sanitary yards and quarters, feeding and watering devices, and disease prevention, then on recognition and simple treatments.

Some of the common diseases which are studied in an elementary way are hog and chicken cholera, blackleg, footrot, influenza, scab, tuberculosis, bloat, colic, and other common diseases. Some little training in simple obstetrics and proper care of the dam are also given.

SOILS AND FERTILIZERS.

This course summarizes the principles of soil management in the light of crop production and crop requirements, which have already been studied. It reviews soil physics and tillage operations. Tillage is discussed from the points of view of the re-

quirements of the various crops, maintaining fertility, storing moisture, controlling insects, etc. Crop rotation, fertilizers, their use and application, liming, and manuring, are also carefully studied. Special emphasis and attention are given to the care and handling of farm manures. Other methods of keeping up the humus supply, such as the use of catch crops, green manuring, spreading straw, etc., are studied. In all of this work constant reference and application to the previous study of crops are made.

Samples of fertilizers of various kinds are available, so that students may examine them. Some practice is given in testing soils for acidity. Principles of chemistry are applied to this work in an elementary way, but as generally as possible.

FARM BUILDINGS.

While houses, sheds, etc., are discussed in connection with each class of livestock and to some extent with the courses on crops, this course brings all that information together and systematizes it for the students' use. There is a brief study of building materials and their uses, foundation materials, paints and roofing materials, and then the major portion of the time given to planning the various buildings found on the average farm.

In connection with the farm management work, exercises are given in selecting a location for the farmstead, arrangement of house and yard, the garden and orchard, the barn yard and its various buildings, so as to be most orderly and convenient, and at the same time be as economical of time and energy as possible.

Plans for small convenient farm houses are drawn, as well as plans for poultry houses, granaries, corncribs, hay sheds, feeding or stock sheds, machine sheds, silos, hog houses, ice houses, etc. All of these plans are for small, simple, but convenient, and durable buildings, such as could be recommended for the small farm with a limited amount of capital to be invested in buildings. Each student works out such a set of plans and prepares estimates and cost of materials needed, and retains these plans and estimates for his own use when he leaves the school and returns to his allotment.

This work is given by the agricultural teacher, the teacher of mechanical drawing and the teacher of woodworking, all co-operating, or at least advising together. The practical work in

connection with the course is given by allowing the boys in the agriculture course to spend some time working with the Mechanic Arts boys on construction and repair work about the farm. It should be remembered that the aim of this course is not to make carpenters, but to enable these students to make practical plans for desirable farm buildings for their farms, that is, buildings which shall be within their means and yet best serve their needs.

Much use is made of Farmer's Bulletins in this course.

ROAD-BUILDING—IRRIGATION AND DRAINAGE.

Practice in this work must be largely incidental and very general. Much is done by having the students visit and observe work going on in the neighborhood of the school. Such observations are, however, limited to roadbuilding and drainage. Elementary lessons on building dirt, or earth, and gravel roads, culverts, etc., are given. This includes use of machinery, width of roadbed, height of crown, width of waterways for different areas, etc.

The chief type of drainage systems and their layout and construction are given. Some practice in simple leveling is given, both for this work and the work on irrigation.

Different methods of irrigation and their layout are studied briefly. Methods of controlling the water, number of times and most favorable time for irrigating different crops, methods of pumping water and types of reservoirs, water-rights on irrigating ditches, etc., are briefly discussed.

FORESTRY AND LANDSCAPE GARDENING.

This course is closely connected with that part of the farm buildings course which has to do with planning the farmstead. A brief time is given to planting and managing the woodlot, to planting windbreaks, and to planting the farm yard. How to plant, care for and shape young trees, the selection of varieties of trees that are hardy in various regions, the proper arrangement of conifers, broadleaved trees and shrubs, and the choice of shrubs for group and hedge planting, are discussed. Some time is given to annual and perennial flowering plants and their proper and practical use on the farm grounds.

Practical work is given in work about the school campus.

In recommending varieties of trees to be used, care is taken

that those which will survive under the conditions in the plains and Western United States are given due prominence. The same consideration, of course, applies to ornamental shrubs and flowering plants.

FARM MARKETING.

A study is made of systems of marketing and preparing products for market. This includes a study of marketing cattle, grain, etc., on the local and on central markets, methods of shipping, receiving and handling such products and caring for them enroute, dealing with commission men, brokers and agents, and consigning goods and receiving payment through banks.

Besides this, market grades and grading of such products as grain, hay, potatoes, and stock are studied and the reasons for such grades explained. For instances, students should understand why a car-load of feeders and a car-load of stockers will sell for more money than two car-loads of mixed stuff. Instruction in studying and comparing or drawing conclusions from market reports is given. Early in the term, market reports as they are given in the daily papers are studied and explained. Such laboratory work in the library is planned as will require students to continue the study of market reports throughout the term. This is made a practical course in training the judgment of the future farmer.

A study is made of marketing farm produce locally. This should include a comparison of marketing in bulk and in smaller amounts of graded materials, such as apples, or vegetables, etc. Special emphasis is placed on the value of a uniform product and one which will meet the market demands. The value of branded and guaranteed products is pointed out, and in this respect the value of a special trade, *i. e.*, regular customers as compared with selling to retailers, is pointed out. Some discussion is given to care of products and their preparation for market.

This course is given on alternate days with farm management, and connects very closely with that work.

FARM MANAGEMENT AND ACCOUNTS (FALL TERM)—FARM RECORDS
AND ACCOUNTS (WINTER TERM)—FARM MANAGEMENT
AND ACCOUNTS (SPRING TERM).

These subjects constitute a course continuous throughout the year. The work is thus distributed in order that it

may be more closely applied to the actual farm problems, and that pupils may have an opportunity to keep real accounts. The farmers on the school farms and the teacher of agriculture cooperate closely in giving this course. Care is taken that during the fall term the work given in the course in Rural Economics, that in Farm Marketing and the work in Farm Management are not duplicated.

In the fall term are given the introductory work, the business side of farming, types of farming, choosing a farm, land tenure, soil and crop management, systems of cropping, and work on farm accounts.

These topics correlate closely with the work in Rural Economics, Soils and Soil Fertility and Farm Marketing, and aim to assist the students in applying that work to practical farm management.

The work in farm accounts is taken up gradually and applied as directly as possible to the actual work students do on the school farms and to the products of the school farms, and the sales or other disposition of these products.

For example, students keep labor accounts of the work done by themselves or the group of men with whom they work, accounts with fields or crop yields, team work, cash expenditures and income, etc. They help to determine how much of the farm products may be sold and how much must be kept to feed to the farm stock, etc. Some attempt is made to determine the profits from the different kinds of crops.

In the winter terms, the work includes planning the farmstead and the farm, farm equipment, farm improvement, and the relation of livestock to farm management. This work correlates with the course on Farm Buildings and Dairying, and lays the foundation for the spring term's work in Farm Animals and Live Stock Production.

The farm accounting work for this term includes inventories, expenditures for tools, equipment, and improvements, fertilizers, etc. Further practice is given in special accounts by having the students keep records and accounts for the dairy herd in connection with the course in dairying, and with products used on the farm in connection with work in Handling and Curing Meats.

In the spring term, the work on Live Stock in relation to Farm Management is completed, and there is a general summary of the

work on farm labor, farm records, determining cost and other factors of management. This summarizes the year's work.

During the winter and spring terms, students have a hand in planning the work of the school farms, deciding how much of each crop should be planted, in what fields it shall be planted, how the soil shall be treated, how much seed and fertilizer are needed, when to plant, etc. In all this work there are two definite aims, (1) to develop foresight and managerial ability, and (2) to train the pupil to apply what he has learned in all the preceding work in agriculture.





LACROSSE TEAM—CARLISLE INDIAN SCHOOL



MECHANIC ARTS BUILDING—CARLISLE INDIAN SCHOOL



Mechanic Arts Courses.

WOODWORK.

This is a general course to be taken by all students. It aims to give them an acquaintance with carpenter's tools, their use and care, with woods of various kinds, with common joints, etc. While doing the productive work about the shop, the student learns to use the tools and materials properly, and gets his first lessons in the use of simple blue-prints or working drawings, and some practice in joining, matching and glueing. The definite instruction work deals with the selection and care of tools, the making of lumber and the fitness of timber from different parts of the log for various purposes, the use of hard and soft woods, some lessons on strength of materials or weight of timber to be used, size, and number of nails and screws, etc.

The course aims to give the general information and training in woodworking and the use of carpenters' tools which every good mechanic should have. It also serves to help the instructors and the boy to determine his fitness for one of the woodworking trades.

PAINTING.

This general introductory course in painting has the same general aim as the one in woodworking. Boys get some practice in painting, mixing paints, staining, varnishing, sandpapering, finishing, etc. Some practice is also given in glazing and puttying.

The definite class work or instruction deals with the oils and other materials used in paints, their source and manufacture, how they may be mixed and combined to produce the proper colors, the relative value of different paints, and the same information concerning waxes, stains, varnishes, etc. Either in this work or the practical work, some definite instruction is given

concerning the choice, use, and care of brushes, tools and materials commonly used in the trade.

This course has the same vocational guidance value as the wood-working course.

BLACKSMITHING.

This, like the courses just described, is a general introductory course. The student learns to handle the fire, to heat iron and the general use of the tools. There are general exercises in forging, welding, drilling, use of dies, etc. This course differs from farm blacksmithing in that it applies to shop and mechanical work rather than to the simple blacksmith work of the farm.

The lecture work deals with shop arrangement, selection of tools, coal and other supplies, with the qualities, uses, and methods of handling different kinds of iron and steel and with their manufacture. As largely as possible, this like the woodwork and painting is so taught as to be of the largest general value, whether the student follows one of the metal working trades or not.

VOCATIONAL GUIDANCE.

During the first two-thirds of the first year, while boys are taking the mechanic arts course, they should have some definite help in learning the actual conditions and possibilities in the various trades open to them. This work is given by the director of the mechanic arts work, and by the different employees best qualified to speak for their trade. The discussions and information gathered include such work as the following: Term of apprenticeship; apprenticeship wages; day work or night work; number of hours of work per day and days per week; number of days work per year; wages, daily, weekly, monthly, and total average yearly wage; health conditions in the industry; social conditions for workman and for his family; possibilities of promotion and increase in salary; chance for future independence as owner of a shop or business; living conditions and cost of living, house rent, fuel, garden, etc.; personal fitness for the work, mental and physical; character, habits, and training essential to success and advancement. These and other topics are discussed. Information is secured from the current magazines, trade journals, labor reports, and other sources.

The aim here is to help the boy to study himself and the in-

dustries, and enable him to choose wisely when he chooses a trade or calling.

SHOP MATHEMATICS.

The year's work in shop mathematics aims to give training in the application of the principles of mathematics to trade and shop problems. The work is applied mathematics throughout with such review of general mathematics from time to time as may be necessary to understand and use intelligently the work given in this course. The instructors in charge of the shop work assist in making practical this course and fitting it to serve the needs of the various trades by sending problems to the teacher so that these problems may be solved in class and may be made a part of the regular course. Students are encouraged to bring new and difficult problems which they may meet to the class for solution and explanation. For class use, such problems are printed by neostyle, or otherwise, and put in the hands of pupils. The course is also correlated closely with the work in Shop Drawing taken by the same students.

The course includes some work in leveling, and the use of measuring instruments, such as the vernier and calipers, and problems applying specifically to the trades, for example, problems involving applications of the lever, pulleys, screws, gears, and gear cutting, thread cutting, belting, horsepower of engines, etc. Likewise, in the building trades, methods of computing and estimating flooring, shingles, stairbuilding, framing, roofwork, masonry, excavating, etc., are given. Simple problems in triangulation are included. Short or trade methods and the use of formulae are emphasized.

During the last term's work, some instruction is given in systems of time keeping, shop accounting and bookkeeping, cost accounting of labor and materials, etc., so that the students may be able to keep business accounts for employers or in shops of their own.

SHOP DRAWING.

This year of work is a general course in mechanical and architectural drawing. The course does not differ from the ordinary course of that kind, except that the instructor continually keeps in mind the importance of giving each boy problems applying to the trade he is learning. As largely as possible, these problems are connected definitely with the work to be done in the

school shops. Where convenient, the same boy works out the plans for a piece of work, and also does the work.

MATERIALS AND CONSTRUCTION.

This course is largely descriptive and partly mathematical. It serves as a gathering up and organizing of information given at various times during the trade practice work of the student.

It deals in general with the choice and fitness of different materials for use under various circumstances, and with such problems as the size and kind of timber to be used for framing, trussing, etc., with the use of steel for like purposes, with amount of steel to be used in re-enforced concrete, with richness of concrete mixtures for different uses, problems in beam designs, columns, torsion riveted joints, etc. As in other courses, the student is trained in the use of sources of information which may be available when he is doing work and has to depend upon himself.

TRADE CALCULATIONS.

This is a course in planning and estimating, looking forward to training boys to become foremen or contractors in a small way. It aims to apply the work in shop mathematics and drawing, as well as the preceding general trade practice. Specific problems in the form of jobs or contracts, etc., are given students to work out. They are required to work from catalogues, trade journals, etc., specific bills of materials and their cost and to estimate the labor, cost, etc. The work is varied to fit the trade which each individual student has chosen. Thus a group of boys may work on the same problem, one calculating the carpentry work, another the masonry and plastering, and a third the painting, papering, etc.

This course lays special emphasis on the interpretation of plans and specifications, and the use of catalogues and trade journals, as a source of information in making estimates.

This work is given by the director of the Mechanic Arts work, with such assistance from the instructors in charge of the various trades as he may desire.

TRADE PRACTICE.

The trade practice work in this course is very largely productive work. However, it is arranged so as to be as instructive as

possible, and to give each individual as wide and general an experience as possible. Care is taken that a boy is not put on one kind of work, and because he becomes skilled in that work kept there. Trade and shop methods are always emphasized. It is always kept in mind that the primary purpose is instruction and training of the students with the greatest economy of time and expense to both the individual and the Government.

The present practice of placing boys where they may work at their trade during the summer is highly satisfactory, and will be continued and encouraged. The directors and instructors give helpful advice in regard to such summer work to the outing managers. As often as possible, the students visit shops and factories and learn all they can of shop methods and organization.





Home Economics Course.

SEWING AND DRESSMAKING.

Except for those girls who may have attended only the public schools before completing the grade required for entrance to this course, practically all will have had the plain sewing and some of the dressmaking in the grades. Generally, the girls are taught first to darn and mend. They then proceed to plain sewing, in the making of such articles as towels, napkins, tablecloths, sheets, pillowcases, etc. As they progress they are given more advanced work in general sewing, abundant practice being found in the manufacture of boys' shirts and all of the various kinds of girls' clothing, including the cutting and fitting of skirts, waists, plain uniform dresses, and the more complicated work incident to the making of evening dresses.

Much attention is given to habits of neatness and accuracy in measuring and drafting and economy in buying and cutting. Pupils are also carefully instructed in the construction, use, care and adjustment of the sewing-machine. Sponging, cleaning, pressing, repairing and altering of garments is given due attention. Choice of style, good taste in color and design, suitability of materials for different purposes, are all emphasized. The hygiene of clothing, economy in dress, relation of dress to wearer, dress as the expression of individuality, are discussed. Some attention is given to the hygiene, selection of materials for and the making of children's clothing.

Several fashion magazines come regularly to the sewing rooms and examples of good design and color are kept continually before the girls.



DOMESTIC SCIENCE DEPARTMENT—DINING ROOM.



NEW DOMESTIC SCIENCE KITCHEN - ACADEMIC HOUSE.

The planning of a wardrobe for a young woman and for a mother and children of moderate means is carefully considered and discussed in the classes.

HOME MILLINERY.

This is a short course designed to teach the girls to remodel, clean, renovate, and trim their own hats. Color combinations, relation of hat to wearer, good taste in hats, life of different kinds of hat trimmings, etc., are studied and discussed.

Practice is given in remodeling and retrimming old hats and in trimming new ones. Materials are kept on hand and a number of new hats are trimmed each season and sold to the girls desiring them at actual cost of the material.

The aim of this course is not to train milliners, but to teach economy and good taste and have the girls learn to become as largely as possible their own milliners.

COSTUME DESIGN.

This is an elementary course. Girls are taught to plan their wardrobes in keeping with their means, to select styles and materials for hats, gowns, wraps, etc., and to adapt the prevailing styles to their individual charm or defects. As every girl has an individuality that should be studied and carefully developed, she should be taught to use intelligent thought in making her costume serve her requirements. The importance of artistic dress, the requirements of dress, the relation of the costume to the wearer and the unity of the whole, are studied and discussed. Dark and light values, color values, color harmony, lines and colors for different figures, are given due attention. Stress is placed on simplicity—the intelligent omission of the superfluous in dress—and on appropriateness of dress for the occasion. For instance, girls are taught that it is bad taste to wear silk dresses and white shoes when they are engaged in the daily tasks of the home, or to wear their best gowns or suits when taking a long journey to their western homes.

The aim of this course is to train girls to use good taste and saneness in dress.

HOME LAUNDERING.

This course is given in addition to the work given in the large steam laundry, where the equipment and methods are neces-

sarily greatly different from those of the ordinary home. For the most part the work of this course is given in the Model Home Cottage, which is provided with simple equipment.

Attention is given to the choice, cost, care and cleaning of laundry utensils and to the preparation for wash day. Careful training is given in the washing of white and colored cloths, the preservation of color, bleaching, removing stains, etc. Mending before and after washing, economy of repairing, renewal of buttons, etc., are given due attention. Instruction is given in the washing and ironing of prints and colored cottons, in the hanging out, drying and folding of clothes. Careful attention is given to proper methods of starching and ironing clothes, and to the various details that are required in properly doing the family laundering.

This course is very practical and is intended to train girls in all the essentials of doing neatly and skillfully the washing and ironing required for the average family.

TEXTILES.

This subject consists of a short study of textiles, their source and manufacture, and their special fitness for special uses. Simple methods of testing various types of goods are given. This course sums up much of the work of the sewing courses, and aims to train girls to test goods and to buy goods well adapted to the purposes for which they are to be used.

ART NEEDLEWORK.

This is the usual course in art needle work, except that it definitely attempts to make use of Indian art and design. As largely as possible, designs made in the course in applied design are worked out in this course. Girls are encouraged to make plain and simple decorative work, as well as the more elaborate kinds. Again in this course the home of moderate means is considered.

COOKING.

The first year's work in cooking is the usual introduction year of work, dealing with the nature, source, etc., of the common foods and the general principles of cooking them, an introduction to nutrient values, economy and management, and details of cooking and kitchen work.

During the second year of work, the course applies much more definitely to the problem of home cooking and management. In a general way, the fall term's work centers about canning, preserving, drying, etc., and the laying in and properly caring for the winter's supply of vegetables and other food which may best be bought in quantity in the fall time. With this work is given some training in marketing, and special training in preserving and in making use of materials which might otherwise spoil or be wasted. During this term or the following, the cooking teacher arranges with the man in charge of the work of butchering to give each girl an opportunity to learn something of the appearance of a properly dressed hog, of how carcasses should be cut up and the parts trimmed preparatory to curing, and of the location of the various cuts of meat and how they may best be cut. The girls also get some training in making sausage, rendering lard, etc.

During the winter and spring terms, the general problem of home cooking is taken up in a more definite way, as well as problems of planning meals not only for one day, but for successive days, of cooking and serving, and of general management. Emphasis is placed on planning to buy the family food and keep within the proper limits of the portion of the family income set aside for that purpose. The matter of cost of foods in relation to their real food value, and the wise choice to make, are taken up. Methods of preparing and using the cheaper cuts of meat, practice in using the fireless cooker, and other matters of economy, find a place in this part of the work.

A part of the time is given to table furnishing and service. This work is demonstrated by members of the class in the domestic science dining room. Here again the emphasis is placed on the possibilities in the modest home with meagre conveniences.

In connection with the work in cooking and serving, a course in table etiquette for both boys and girls is given. A few boys are assigned for this duty for a period of two or three weeks, and during this period, they eat such meals with the domestic science class as the domestic science teacher may direct. The boys take turns at serving, and the girls at acting hostess. The service varies from the simplest home meal to the formal dinner. The meal time and after is used as a time for general instruction and discussion of various points of etiquette. Strong effort is made

to keep this discussion informal and so free as to encourage questions. Relays of boys are changed frequently enough to give opportunity to a large number during the year. Only a few go at any one time. These are chosen with consideration of their need, fitness, and nearness to the time of leaving school.

PHYSIOLOGY AND HYGIENE.

No attempt is made in this course to review all the work of grade school physiology.

The term's work gives a more complete knowledge of the process of digestion, and to that extent serves as preparatory work for the course in cooking. This occupies but a small portion of the term's work.

The major portion of the term's work is given to personal hygiene and to elementary work on contagious and infectious diseases.

The work on personal hygiene deals with the commonplace subjects of hygiene, care of eyes, teeth, nails, etc., bathing, and hygiene in relation to clothing, bedding, etc. Since this work will be given to a girl's class, the discussion is made to apply much more intimately to the problems of young women and mothers, than they could if the work were to be presented to mixed classes.

Each girl learns the general causes and methods of distribution of contagious and infectious diseases. Some of the commoner and more important of these are studied somewhat more in detail, for example, measles, diphtheria, smallpox, chickenpox, whooping cough, tuberculosis, pneumonia, typhoid malaria, etc. The discussion of each of these includes sources of infection; methods of distribution; periods of incubation; symptoms; treatment; quarantines and methods of isolation; methods of fumigation and sterilization of rooms, bedding, clothing, dishes, etc., disposal of sputum and excreta; and general care and rules to be observed. Aside from its practical application, the latter portion of this work prepares for the work in home sanitation. Special stress is placed on the treatment and care of trachoma, and how it spreads from one person to another, especially in the house.

In all of this work from the simple problem of bathing to the treatment and management of diseases, the teacher keeps in mind the conditions and the materials and supplies available in the

simplest of homes in villages or in the country. The whole problem is one of preparing girls to look after these matters of individual and community health, where the resources of the modern city home are not available.

HOUSEHOLD INSECTS AND HOME SANITATION.

Following as it does the work in physiology and hygiene, the portion of this course dealing with home sanitation is given during the first part of the term, and that on household insects later.

Under home sanitation are considered problems of sunlight and ventilation (both house and cellar); temperature during winter; general cleanliness; methods of dusting, sweeping and cleaning; care of sleeping rooms and bedding; source of water supply; disposal of waste, excreta, etc.; care of food in pantry and cellar; control of molds and bacteria; and a general review of special problems discussed in the course in physiology and hygiene.

Under household insects is studied the appearance, injury, habits (food, breeding and hiding), and methods of combatting the commoner insect pests of the household. In this list should be included such insects as the red ant, cockroach, bed bug, carpet moth and buffalo moth, fish moth, head lice, itch mites, flies, mosquitoes, fleas, and various insects injurious to foods. These are considered with a view to preventing their occurrence and to destroying them before they do serious injury if they do make an appearance.

HOME NURSING AND CARE OF CHILDREN.

This course includes emergency treatment for severe wounds, broken bones, drowning, fainting, etc. Emphasis should be placed on preparation and use of simple aseptic materials for caring for small wounds, burns, etc. Each girl is taught to apply bandages, and should know something of the use and application of simple home remedies. The very common cry of "no home doctoring" sounds very scientific and may be practical enough for the well-to-do city dweller, but the girls who will be housekeepers on farms miles from town and a physician and who will often be left alone with children for days at a time are under decidedly different circumstances. The object of this course is to prepare the girls taking the Home Economics course to act quickly and intelligently under just such conditions. The girls learn how to make an emergency bag and to know the important articles for it,

such as bandages, absorbent cotton, pins, and the commoner remedies that a home in which there are young children should have ready for immediate use. This includes remedies for croup, colds, skin eruptions, etc., the use of physics, enemas, treatment of fever, chills, and other ailments of like character. There is some training in caring for sick persons, proper ventilation, and heating of the room, bathing sick persons, changing bedding and feeding the sick. All of this is given in an elementary way with two aims in view: first, to prepare the girl to care properly for simple injuries and indispositions of the family, and to judge when a physician should be called; second, to fit her to follow intelligently and exactly the advice of the physician after he has been called.

Some time is given to hygiene and care of young children (not very young infants), their hours of sleep, regularity of habits, proper feeding, open air exercise and sleeping, proper clothing, bathing, etc., in addition to the treatment of children's ailments as indicated above.

COLOR AND DESIGN I AND II.

This course includes such training in freehand and object drawing, sketching, drafting, drawing to scale, constructive drawings, margins, spacing, etc., as may be necessary. The amount and time given to this work will depend upon the elementary drawing which pupils have had or the native ability and taste they may have when taking up this course. This is not preparatory to art work, but to prepare girls to properly design and draft (with the aid of the technical training received in the sewing course) dresses and other garments, millinery, table linens, dresser scarfs, etc., and plan and arrange a simple home artistically. Along with this work is given the study of colors, their value, combinations and uses, with a view to applying them in the same way.

In the teaching of design, every possible advantage is taken of native Indian art. This is fostered and encouraged. There is no attempt to standardize this and make it uniform, but to encourage each pupil to use and develop the art and symbolism peculiar to her own tribe or people. The untold and undeveloped native art of the various Indian tribes can not be developed and applied in any other way, and unless its use in this way

is encouraged, it is certain to be lost with the breaking up and scattering of the tribes and the death of the older people.

During these two terms of general work, much of the work in design is individual rather than class work, and aims to develop taste and originality rather than adherence to a prescribed course of study. Special effort is made to encourage designs, which may be applied to Indian arts—crafts work, such as blankets, rugs, basketry, pottery, leather and bead-work.

APPLIED DESIGN.

This term's work attempts to apply in a specific way whatever artistic ability may have been developed during the preceding work. Native Indian Art and symbolism are fostered here just as carefully, but in this case it is applied to a specific purpose. Application is made to dress designing and ornamenting, to millinery, to embroidery and art needlework, hand bags, table runners, belts, marking linen, and various forms of home decoration, finishing and furnishing. This work has three general aims; first, workings and designs, which are later to be made in the sewing department, art needlework, or in the courses in dyeing and weaving; second, practical plans for selecting furniture, rugs, curtains, paint and wall finish for a modest home; third, a training in the application of Indian art to simple handicrafts, with the possibility of girls putting this training to future use as a means of earning pin money or possibly contributing to their support.

DYEING AND WEAVING I AND II.

These courses like the preceding are practical and applied, especially making use of Indian art and craftsmanship. Students learn the elementary principles of dyeing with modern commercial dyes. This is necessary because the supply of materials from which the dyes used under primitive conditions were obtained is rapidly disappearing. Girls are taught to apply these dyes to leather, basketry materials, and the various textiles and fabrics. Some attention is given to stencilling and leather work.

The work in weaving includes simple lessons in making braided rugs from rags, rag carpet weaving, rug weaving, basketry, mat weaving, etc. Advantage is taken of not only the materials available near the homes of the girls, but also of commercial mater-

ials. The practical work of stenciling curtains, couch covers, table runners, and other like articles and of making rag carpets, rag rugs, etc., is not overlooked or slighted.

At least one or two weeks at some favorable time during the winter term are given to making quilts and comforters. Girls are taught to make patchwork quilts, to make the lining, fasten it in the frames, put on the cotton and to both quilt and knot quilts and comforters. Enough of this work is done so that each girl may have an intimate knowledge of each part of the process.

Throughout both terms of work, the two-fold aim, the practical work and development of Indian art, is not lost sight of.

MANUAL TRAINING I.

In this course, girls learn to use the common tools, saw, hammer, brace and bit, screw driver, etc., to know the commoner furniture and finishing woods, to glue, to stain, to wax and to paint. The purpose is to fit them to be independent so far as the use of tools is concerned, so that they may be able to do many of the little chores that must be done about the house.

While learning to use tools they are allowed to make articles for their own rooms as far as possible.

MANUAL TRAINING II.

This work is closely related to the course in Home Arrangement and Decoration. The work given here is largely training in the use of materials discussed and selected in the Home Arrangement and Decoration course. It deals with paints and painting, varnishing, staining, and waxing, (to complete the work of the preceding term,) selecting, preparing and applying different kinds of wall finishes, putting on wall paper, putting up curtain fixtures, etc.

Both terms of work are practical and aim to give the general experience which is usually furnished by the routine of daily home life.

HOME DAIRY WORK.

In this course, girls get training and instruction in the care of milk vessels and utensils, straining milk, raising cream by the shallow pan method, using separators and keeping them clean, caring for ripening and churning cream, washing, working, and salting butter; making butter into rolls and prints and pound

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NEW DINING ROOM—GIRLS' QUARTERS.



CORNER OF RECEPTION ROOM—GIRLS' QUARTERS.

cubes, and thus preparing it for market, and in caring for butter in the home to keep it palatable. The girls learn to make cottage cheese and other simple dairy products, and to use butter-milk and skimmed milk in cooking. Economy in the use of the by products of farm and dairy is emphasized. For example, girls are taught the high feeding value of skim milk, butter milk and washings of milk vessels and butter, for poultry and hogs.

This course is given during the fall term when weather conditions are most unfavorable for successful butter-making, so that the girls will meet the difficult problems while they can go to the teachers for helpful suggestions. The equipment is simple, but practical. Two types of churn are used, dash and barrel types. All the girls operate and clean at least once the separator used at the farm dairy.

CHILD WELFARE AND MOTHERHOOD.

This course aims to be a careful and intimate preparation for marriage and motherhood. The course includes a brief consideration of the importance of proper parentage, and especially motherhood, both to the individual and to the home and society at large. Here is considered the importance of marriage, and especially the habits and health of the contracting parties. Girls are given a series of lessons concerning their own development—the physiological changes during and after adolescence. This is followed by brief, but clear and unambiguous lessons concerning the sex organs, of fertilization, embryonic development, and other stages in reproduction. Then are given lessons on venereal diseases, their distribution and effect both on parents and possible future generations. These lessons are followed by discussions of the importance of a clean sex life on the part of both parents, and the importance of the young woman being reasonably sure of the cleanliness of the young man. Next come lessons on conduct of young men and women, especially concerning behavior and liberties allowed between sweethearts or during courtship.

Special lessons given concerning woman's care of herself, diet, exercise, frame of mind, etc., during pregnancy, the proper preparation for the child, the making of the infant layette, the bathing and care of the new born infant, and the feeding and care of the child for the first year or two of its life.

Such a course is of special importance to young Indian girls,

who are returning to a life under more or less primitive conditions, and, perhaps, in communities in which there will be no one to whom to go for advice. Such a course should also do much to eradicate vice and immorality among Indians.

The course is given in the main by the matron and in the most intimate kind of a way. It is not a classroom course, but is given in the matron's room, a parlor, or girls' reading room, where there may be much of informality and discussion. The class hour is fixed for the convenience of the matron. Some of the more scientific lectures are given by the school physician and the school nurse, but the course is in charge of the matron or such person as she may designate to take charge. Before the end of the course, each girl is required to make and to keep as her personal property a complete infant's layette. This she is permitted to take with her when she leaves the school.

The matron has authority to admit other girls to this course at her discretion. She considers not school attainment, but age, physical development, and the probability of the individual leaving school before completing the vocational course.

HOME ARRANGEMENT AND DECORATION.

This course deals with the arrangement of rooms, closets, cupboards, cellar, and water supply for convenience, comfort and health. It also deals with the selection of furniture, rugs, curtains, etc., the finishing of walls, woodwork and floors. All of these things are considered from the point of view of the modest workman's or farm home.

This course is made practical and exact by studying prices and wearing qualities, as well as pleasing effects.

HOUSEHOLD ACCOUNTS AND HOME MANAGEMENT.

This course is in a very practical way a summing up and coordinating of all the home economics work.

A simple system of accounting is taught, so as to train girls not only to keep account of, but to regulate and properly distribute expenses for food, clothing, fuel, and other household necessities.

A study and plan are made of the minimum equipment for a modest home, and the next most important supplies above the minimum. This includes cost, prices, etc. It also includes a

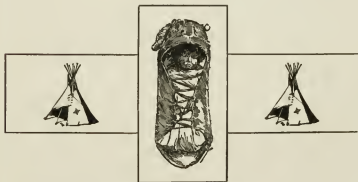
summing up of the furnishings for the whole home, kitchen and cooking utensils, dishes and other table ware, table linen, bed linen, and other bedding, laundry equipment, and other housekeepers' supplies.

Practical training is given in the Model Home Cottage in planning the daily routine of housework and properly caring for the home. This includes sweeping and dusting, care of bedding, soiled clothing and laundry work, care of lamps, cleaning, etc.

A study of marketing is made, discussing its problems, buying in bulk, putting in supplies from the home or market, such as canning, preserving or drying fruits, vegetables, corn, etc.

These and other general problems, which are continually arising to vex the young housekeeper, are given careful study. As much attention is given to sources of information for solving problems as to the solution of the theoretical problems that may be studied.

This course is the more important in this school because the requirements of productive work do not permit so full and complete a discussion of some of these problems in connection with the sewing and other work as might be given in other schools.





Books of Reference.

The following books relating to the various subjects in the courses in Agriculture, Mechanic Arts, and Home Economics, and on Vocational Education, are available for reference:

AGRICULTURE.

- | | |
|---|---|
| Field Book of American Trees and Shrubs (Matthews). | Feeding of Live Stock (Shaw). |
| Physics of Agriculture (King). | Horse Book (Johnston). |
| Practical Farming (Massey). | Short-horn Cattle (Sanders). |
| Principles of Agriculture (Winslow). | Diseases of Horses and Cattle (McIntosh). |
| Training of Farmers (Bailey). | Sheep Book (Biggle). |
| Irrigation and Drainage (King). | Sheep and Their Diseases (Rushworth). |
| Fertilizers (Voorhees). | Swine Husbandry (Coburn). |
| Irrigation Farming (Wilcox). | Farm Poultry (Watson). |
| Spraying of Plants (Lodemon). | Practical Dairy Bacteriology (Conn). |
| Cereals in America (Hunt). | First Lessons in Dairying (Van Norman). |
| Book of Corn (Myrich). | Modern Methods of Testing Milk (Van Slyke). |
| Indian Corn Culture (Plumb). | Field Crops (Wilson and Warburton). |
| Forage Crops (Shaw). | Practical Talks on Farm Engineering (Clarkson). |
| Alfalfa (Coburn). | Profitable Stock Feeding (Smith). |
| Farm Grasses of the United States (Spilman). | Popular Fruit Growing (Green). |
| Nursery Book (Bailey). | The Farmer's Veterinarian (Burkett). |
| Pruning Book (Bailey). | Dairy Cattle and Milk Production (Eckles). |
| Principles of Fruit Growing (Bailey). | Soils and Crops (Hunt and Baker). |
| Practical Forestry (Fuller). | |
| American Apple Orchard (Waugh). | |
| Forcing Book (Bailey). | |
| Garden Making (Bailey). | |
| Feeds and Feeding (Henry). | |

- The Principles of Fruit Growing (Bailey).
 Principles and Practice of Judging Live Stock (Gay).
 Elements of Forestry (Moon and Brown).
 Soils (Burkett).
 First Principles of Soil Fertility (Vivian).
 Types of Breeds of Farm Animals (Plumb).
 Principles of Breeding (Davenport).
 Soil Fertility and Permanent Agriculture (Hopkins).
 Principles and Practice of Poultry Culture (Robinson).
 Farm Management (Boss).
 Elementary Entomology (Sander-son and Jackson).
 Field Crop Production (Living-son).
 Handy Farm Devices and How to Make Them (Cobleigh).
 School and Home Gardens (Meier).
 Dry Farming (Widtsoe).
 The Principles of Vegetable Gardening (Bailey).
 Milk and Its Products (Wing).
 Productive Farming (Davis).
 Soils and Soil Fertility (Whitson and Walster).
 Poultry Production (Lippincott).
 Barn Plans and Out-Buildings (Orange Judd Co.).
 Farm Machinery and Farm Motors (Davidson and Chase).
 Farm Buildings (Breder's Gazette).
 Agricultural Drafting (Howe).
 Luther Burbank's Inventions and Discoveries.
 Vegetable Gardening (Green).
 Breeding of Farm Animals (Harper).
 Beginners Animal Husbandry (Plum).
 Vegetable Growing (Green).
 Judging Live Stock (Craig).
 Farm Animals (Hunt and Baker).
 Agricultural Engineering (Davidson).
 Poultry Architecture (Fiske).
 Animal Husbandry for Schools (Harper).
 Lessons on Soil (Russell).
 Problems of Community Life (Eldridge).

MECHANIC ARTS.

- Hand Craft in Wood and Metal (Hooper and Shirley).
 Wood and Forest (Noyes).
 Cement and How to Use It (Rufford).
 Standard Practical Plumbing (Starbuck).
 Shop Arithmetic (Norris and Smith).
 Applied Mathematics (Cobb).
 Shop Problems in Mathematics (Breckenridge—Mersereau and Moore).
 Shop Mathematics (Holton).
 Applied Mechanical Drawing (Mathewson and Stewart).
 Forge Practice (Bacon).
 Materials and Construction (Pratt).
 Industrial Mathematics (4 vols.) (Marsh).
 Inside Finishing (King).
 Constructive Carpentry (King).
 Materials of Machines (Smith).
 Machine Shop Practice (Kaup).
 Laboratory Course in Woodworking (Golden).
 How to Use Woodworking Tools.
 Essentials of Woodworking (Griffith).
 Correlated Courses in Woodworking and Mechanical Drawing (Griffith).

- Woodwork and Construction (King).
 Design and Construction in Wood (Noyes).
 Handwork in Wood (Noyes).
 Forge Shop Practice (Littlefield).
 Forge Work (Ilgen).
 Plaster and Plastering (Hodgson).
 Manual of Shoemaking (Dooley).
 Modern Engineering Practice (12 vols.) (Gunsaulus).
 Estimating (Nichols).
 Practical Bricklaying (Hodgson).
 Masonry Construction (Phillips).
 Inside History of the Carnegie Steel Company (Bridge).
 Playbook of Metals (Pepper).
 Manufactures (Rockelean and Cushing).
 Telephone Construction (Radcliff and Cushing).
 Elementary Woodwork (Kilbon).
 Manual Training Woodwork (Ricks).
 Exercises in Woodworking (Sickels).
 Carpentry and Joinery (Townsend).
 Practical Up-to-date Plumbing (Clow).
 Modern Hotwater Heating (Donaldson).
 Soft Soldering, Hard Soldering and Brazing (Hobart).
 Steam and Hotwater Heating (King).
 How to Make Common Things (Bower).
 Amongst Machines (Lukins).
 Forging (Bacon).
 Practical Horseshoer (Richardson).
 Farm Blacksmithing (Drew).
 Modern Blacksmithing (Hobstrom).
 The Expert Wood Finisher (Fowler).
 The Building of It (Keith).


HOME ECONOMICS.

- Practical Homemaking (Kittredge).
 Home Economics (Parloa).
 Art and Economy in Home Decoration (Priestman).
 Laundry Work in Theory and Practice (Marsh).
 Domestic Science (Campbell).
 Dyes and Dyeing (Pellew).
 Library of Home Economics (Watson).
 Practical Home Millinery (Reeve).
 Furnishing a Modest Home (Daniels).
 Color Study (Cross).
 The Modern Household (Talbot and Breckenridge).
 House Sanitation (Talbot).
 Handbook of Home Economics (Flagg).
 Shelter and Clothing (Kinne and Cooley).
 Laundry Work (Sheppard).
 Domestic Art in Woman's Education (Cooley).
 What to Eat and How to Serve It (Herrick).
 Common Sense in the Household (Turhune).
 Cost of Food (Richards).
 School Needlework (Haggood).
 Hand Sewing Lessons (Krolik).
 Scientific Sewing (Wakeman).
 Laundry Work (Shepperd).
 Home Nursing (Harrison).
 Table Service (Allen).
 Home, School and Vacation (Allen).
 A Mother's Ideal (Proudfoot).
 Increasing Home Efficiency (Bruce).
 The Education of Women (Talbot).
 The Modern Mother (Gordon).

- Progress in the Household (Salmon).
 Girl and Woman (Latimer).
 Women's Health and How to Take Care of It (Stockpoole).
 Domestic Art (Ingalls).
 Hand-loom Weaving (Todd).
 How to Make Baskets (White).
 Nutrition and Diet (Conley).
 Principles of Cooking (Conley).
 Physics of the Household (Lynde).
 Insects Injurious to the Household (Herrick).
 Elementary Household Chemistry (Snell).
 Equipment for Domestic Science (Kinne).
 How to Keep Household Accounts (Haskins).
 Self Supporting Home (St. Mawr).
 Housekeeping Made Easy (Herrick).
 Our Homes; How to Beautify Them (Judd).
 Expert Waitress (Springstead).
 From Kitchen to Garret (Van der Water).
 Kitchen and Diningroom Work (Willard).
 Parlor, Bedroom and Laundry (Willard).
 Sanitary and Economic Cook (Abel).
 Boston Cooking School Cook Book (Farmer).
 Science of Nutrition (Atkinson).
 Home Science Cook Book (Lincoln).
 Bright Ideas for Entertaining (Linscott).
 Home Entertainment (Chanery).
 The Efficient Life (Gulick).
 Personal Hygiene and Physical Training for Women (Galbraith).
 Boys, Girls and Manners (Hall).
 Woman and Girlhood, Wifehood and Motherhood (Cohen).
 What Our Girls Ought to Know (Studley).
 Neighborhood Entertainments (Stern).
 Health and Happiness (Mosher).
 Women with Empty Hands (Carter).
 The Man and the Woman (Salmon).
 Democracy and Social Ethics (Adams).
 Helps for American Girls (Drysdale).
 Women's Ways of Earning Money (Alden).
 Some Successful Women (Bolton).
 The Business of Being A Woman (Tarbell).
 The Girl's Book About Herself (Barnard).
 The Meaning of Social Science (University of Chicago Press).
 Work and Life (Howerth).

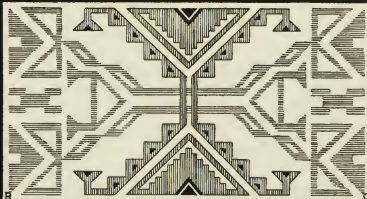
VOCATIONAL EDUCATION.

- The Vocational Guidance of Youth (Bloomfield).
 Education for Industrial Purposes (Seath).
 The Problem of Vocational Education (Snedden).
 The Making of a Trade School (Woolman).
 Vocational Arithmetic (Vincent).
 Examples of Industrial Education (Leavitt).
 Choosing a Vocation (Parsons).
 Vocational Guidance (Puffer).
 Vocational and Moral Guidance (Davis).
 Hand Book of Vocational Education (Taylor).
 Vocation and Learning (Munsterburg).
 Vocations for Girls (Weaner).
 Vocations for the Trained Woman (Perkins).
 Manual Training and Vocational Education (Manual Arts Press).



DEALS are like
stars; you will not
touch them with
your hands, but like
the sea-faring man on
the desert of waters,
you choose them as
your Guides, and, fol-
lowing them, you reach
your destiny.

CARL SCHURZ



List of Graduates of the Carlisle Indian School, 1889 to 1915.

Class of 1889.

NAME AND TRIBE.	ADDRESS.
Esther Miller Dagenett, <i>Miami</i> ,	Rocky Ford, Colo.
Joseph Harris, <i>Grosvonts</i> ,	Langhorne, Pa.
Kish Hawkins, <i>Cheyenne</i> ,	Darlington, Okla.
Cecilia Londrosh Herman, <i>Win.</i> ,	Winnebago, Neb.
Edwin Schanandore, <i>Oneida</i> ,	Albuquerque, N. M. (I. S.)
Julia Powlas Wheelock, <i>Oneida</i> ,	Ind. Sch. Keshena, Wis.
Joel Tyndall, <i>Omaha</i> ,	(Deceased)
William F. Campbell, <i>Chippewa</i> ,	Do.
Lillian Cornelius, <i>Oneida</i> ,	Do.
Frank Dorian, <i>Sac & Fox</i> ,	Do.
Clara Faber, <i>Wyandotte</i> ,	Do.
Katie Grindrod, <i>Wyandotte</i> ,	Do.
Thomas Wister, <i>Ottawa</i> ,	Do.
Eva Johnson, <i>Wyandotte</i> ,	Do.

Class of 1890.

Nellie Robertson Denny, <i>Sioux</i> ,	Carlisle, Pa., I. T. S.
Rosa Bourassa LaFlesche, <i>Chipp.</i> ,	Ind. Office, Wash., D. C.
Benjamin Lawry, <i>Winnebago</i> ,	Winnebago, Neb.
Levi Levering, <i>Omaha</i> ,	Macy, Neb.
Stacey Matlock, <i>Pawnee</i> ,	Pawnee, Okla.
George Means, <i>Crow</i> ,	Manderson, S. D.
Julia Bent Prentiss, <i>Cheyenne</i> ,	Darlington, Okla.
Veronica Holiday Raiche, <i>Chippewa</i> ,	Odanah, Wis.
Lawrence Smith, <i>Winnebago</i> ,	Winnebago, Neb.
Benjamin Thomas, <i>Pueblo</i> ,	Bibo, N. Mex.
Dennison Wheelock, <i>Oneida</i> ,	West De Pere, Wis.
Percy Zadoka, <i>Keechi</i> ,	Anadarko, Okla.
William Tivis, <i>Comanche</i> ,	(Deceased.)
Jemima Wheelock, <i>Oneida</i> ,	Do.
George Valier, <i>Ottawa</i> ,	Do.
William Morgan, <i>Pawnee</i> ,	Do.
Howard Logan, <i>Winnebago</i> ,	Do.
Carl Leider, <i>Crow</i> ,	Do.

Class of 1891.

Martin Archiquette, <i>Oneida</i> ,	Anadarko, Okla.
Henry Standing Bear, <i>Sioux</i> ,	Porch, S. D.
Levi St. Cyr, <i>Winnebago</i> ,	Winnebago, Nebr.

Class of 1891—Continued.

Charles E. Dagenett, <i>Miami</i> ,	Washington, D. C.
Harry Kohpay, <i>Osage</i> ,	Pawhuska, Okla.
Yamie Leeds, <i>Pueblo</i> ,	Laguna, N. M.
Josiah Powlas, <i>Oneida</i> ,	Oneida, Wis.
John Tyler, <i>Cheyenne</i> ,	(Deceased.)
Etta Robertson, <i>Sioux</i> ,	Do.
William Froman, <i>Miami</i> ,	Do.

Class of 1892.

Benjamin Caswell, <i>Chippewa</i> ,	Detroit, Minn.
Luzena Choteau Roscamp,	Chafey, Nev.
<i>Wyandotte</i> ,	
Isabel Cornelius Denny, <i>Oneida</i> ,	West De Pere, Wis.
Frank Everett, <i>Wichita</i> ,	Anadarko, Okla.
Lydia Flint Spencer, <i>Shawnee</i> .	Wyandotte, Okla.
Benajah Miles, <i>Arapaho</i> ,	Calumet, Okla.
Thomas Metoxen, <i>Oneida</i> ,	Kaukauna, Wis.
Fred Peake, <i>Chippewa</i> ,	Minneapolis, Minn.
	8 Grove St.
William Baird, <i>Oneida</i> ,	(Deceased.)
Albert Bishop, <i>Seneca</i> ,	Do.
Reuben Wolfe, <i>Omaha</i> ,	Do.
Hattie Longwolf, <i>Sioux</i> ,	Do.
Joseph Hamilton, <i>Piegan</i> ,	Do.

Class of 1893.

John Baptiste, <i>Winnebago</i> ,	Winnebago, Nebr.
Fred Bighorse, <i>Sioux</i> ,	Cut Meat, S. D.
Malcolm Clarke, <i>Piegan</i> ,	Browning, Mont.
John G. Morrison, <i>Chippewa</i> ,	Red Lake, Minn.
Emily Peake Robitaille, <i>Chippewa</i> ,	Carlisle, Pa.
Arthur Johnson, <i>Wyandotte</i> ,	Anadarko, Okla.

Class of 1894.

Thomas Blackbear, <i>Sioux</i> ,	Porcupine, S. D.
William Denomie, <i>Chippewa</i> ,	Odanah, Wis.
Florence Wells Davis, <i>Alaskan</i> ,	Genoa, Nebr.
Flora Campbell Fitzgerald, <i>Alaskan</i> ,	Sitka, Alaska.
James Flannery, <i>Alaskan</i> ,	(Unknown.)
Howard E. Gansworth, <i>Tuscarora</i> ,	Buffalo, N. Y.
	500 Normal Ave.,
Minnie Yandell LeSieur, <i>Bannock</i> ,	Fort Hall, Idaho.
Siceni J. Nori, <i>Pueblo</i> ,	Carlisle, Pa.
Hugh Soucea, <i>Pueblo</i> ,	Ship Rock, N. M.

Class of 1894—Continued.

Martha Napawat Thomas, <i>Kiorwa</i> ,	Anadarko, Okla.
Ida Warren Tobin, <i>Chippewa</i> ,	Bismark, N. D.
Henry Warren, <i>Chippewa</i> ,	Bena, Minn.
Ida Powlas Wheelock, <i>Oneida</i> ,	West Depere, Wis. RFD.
Emanuel Bellefeuille, <i>Chippewa</i> ,	(Deceased.)
Belinda Archiquette, <i>Oneida</i> ,	Do.
William J. Tygar, <i>Sbarwnee</i> ,	Do.
Florence Miller, <i>Stockbridge</i> ,	Do.
Susie Metoxen, <i>Oneida</i> ,	Do.
Andrew Beard, <i>Sioux</i> ,	Do.

Class of 1895.

Antoine Donell, <i>Chippewa</i> ,	White Earth, Minn.
Henrietta Fremont, <i>Omaha</i> ,	Walthill, Nebr.
William Hazlett, <i>Pigan</i> ,	Aberdeen, Wash.
William Lufkins, <i>Chippewa</i> ,	White Earth, Minn.
Susie McDougall, <i>Chippewa</i> ,	Genoa, Nebr.
Ida LaChapelle McTavish, <i>Chipp.</i> ,	(Unknown.)
William Moore, <i>Sac & Fox</i> ,	Prague, Okla., R.F.D.
Alice Lambert Otto, <i>Chippewa</i> ,	Ogema, Minn.
Chauncey Yellow Robe, <i>Sioux</i> ,	Rapid City, S. D.
Melissa Green Schenandore, <i>Oneida</i> ,	Oneida, Wis.
Samuel Sixkiller, <i>Creek</i> ,	Del Rio, Tex.
David Turkey, <i>Wyandotte</i> ,	Newtown, Pa.
George Warren, <i>Chippewa</i> ,	White Earth, Minn.
Laura Long, <i>Wyandotte</i> ,	(Deceased.)
Louis Williams, <i>Nez Percé</i> ,	Do.
James Van Wert, <i>Chippewa</i> ,	Do.
George Suis, <i>Crow</i> ,	Do.
Clark Gregg, <i>Assiniboine</i> ,	Do.
George Buck, <i>Sioux</i> ,	Do.

Class of 1896.

Johnson Adams, <i>Chippewa</i> ,	Keshena, Wis.
Susie Davenport Bonga, <i>Chippewa</i> ,	Cross Village, Mich.
Frank Cayou, <i>Omaha</i> ,	Chicago, Ill. A.G. Spalding Sporting Goods.
Leila Cornelius Caswell, <i>Oneida</i> ,	Detroit, Minn.
Leander Gansworth, <i>Tuscarora</i> ,	Davenport, Iowa.
Timothy Henry, <i>Tuscarora</i> ,	Lewiston, N. Y. R. F. D.
Herman N. Hill, <i>Oneida</i> ,	West De Pere, Wis.
Frank Hudson, <i>Pueblo</i> ,	Wycombe, Pa.
Robert Jackson, <i>Chehalis</i> ,	Unknown.
Cora Snyder Jones, <i>Seneca</i> ,	Versailles, N. Y.
LeRoy Kennedy, <i>Seneca</i> ,	Buffalo, N. Y.
John Leslie, <i>Puyallup</i> ,	Olympia, Wash.

Class of 1896—Continued.

Joseph Martinez, <i>Crow</i> ,	Lodge Grass, Mont.
Cynthia Webster Moore, <i>Oneida</i> ,	Kaukauna, Wis.
Alice Parker Fairbanks, <i>Chippewa</i> ,	White Earth, Minn.
Mark Penoi, <i>Pueblo</i> ,	Anadarko, Okla.
Elmer Simon, <i>Chippewa</i> ,	
Adelia Lowe Twiss, <i>Sioux</i> ,	Porcupine, S. D.
Delos Lone Wolf, <i>Kiowa</i> ,	Ft. Cobb, Okla.
Julia Elmore Webster, <i>Digger</i> ,	Redding, Cal.
James R. Wheelock, <i>Oneida</i> ,	Riverside, Cal., I. S.
Mark Wolfe, <i>Cherokee</i> ,	Crow Agency, Mont.
Edward Spotts, <i>Puyallup</i> ,	(Deceased.)
Louise Geisdorff, <i>Crow</i> ,	Do.
Wm. Leighton, <i>Crow</i> ,	Do.

Class of 1897.

Annie Kowuni Abner, <i>Pueblo</i> ,	Albuquerque, N. M.
Mabel Buck Block, <i>Sioux</i> ,	Pawhuska, Okla.
Grace Redeagle Walker, <i>Quapaw</i> ,	Baxter Springs, Kans.
Robert Depoe, <i>Siletz</i> ,	Siletz, Ore.
Mary Miller Dodge, <i>Chippewa</i> ,	Genoa, Neb.
Samuel Gruett, <i>Chippewa</i> ,	Mt. Pleasant, Mich.
Olive Miller Jacobs, <i>Stockbridge</i> ,	Gresham, Wis.
Frank Jones, <i>Sac & Fox</i> ,	Wellington, Kan.
Sarah Smith King, <i>Oneida</i> ,	Oneida, Wis.
Charles Mishler, <i>Chippewa</i> ,	Chippewa Falls, Wis.
Louis Mishler, <i>Chippewa</i> ,	Chippewa Falls, Wis.
Albert Nash, <i>Winnebago</i> ,	5821 Market St., Phila., Pa.
Edward Rogers, <i>Chippewa</i> ,	Walker, Minn.
Nancy Seneca, <i>Seneca</i> ,	Pawnee, Okla.
Frank Shively, <i>Crow</i> ,	Odanah, Wis.
Martha Owl Simpson, <i>Cherokee</i> ,	
Clarence White Thunder, <i>Sioux</i> ,	Rosebud, S. D.
Lizzie Hill Tyndall, <i>Sioux</i> ,	Walthill, Nebr.
Christine Wirth West, <i>Assiniboine</i> ,	Poplar, Mont.
Henry Red Kettle, <i>Sioux</i> ,	(Deceased.)
Julia Williams, <i>Chippewa</i> ,	Do.
Alex. Uphaw, <i>Crow</i> ,	Do.
Edith Smith Haffner, <i>Tuscarora</i> ,	Do.
Clark Smith, <i>Klamath</i> ,	Do.
Brigman Cornelius, <i>Oneida</i> ,	Do.
William Sherrill, <i>Cherokee</i> ,	Do.

Class of 1898.

Cora Cornelius Adams, <i>Oneida</i> ,	West Depere, Wis., RFD.
Ralph Armstrong, <i>Nez Perce</i> ,	Webb, Idaho.
Mitchell Barada, <i>Omaha</i> ,	Plainview, S. D.
Susie Henni Beardsley, <i>Pueblo</i> ,	Seama, N. M.

Class of 1898—Continued.

Clarence Butler, <i>Coeur d'Alene</i> ,	St. Maries Ida.
Lottie Horne Cochran, <i>Klamath</i> ,	Beloit, Kans.
Martha Sickles Cornelius, <i>Oneida</i> ,	West De Pere, Wis. RFD.
Jacob Jamison, <i>Seneca</i> ,	Gowanda, N. Y.
Lillian Complainville Keller, <i>N. P.</i> ,	Troy, Idaho,
Edith Pierce Ladue, <i>Seneca</i> ,	Richwood, Minn.
Annie Morton Lubo, <i>Pueblo</i> ,	Riverside, Calif. I. T. S
Sarah Flynn Manning, <i>Assiniboine</i> ,	Culbertson, Mont.
David McFarland, <i>Nez Perce</i> ,	Ft. Lapwai, Idaho.
Rienzi Moore, <i>Sac & Fox</i> ,	Oklahoma City, Okla.
Edward Peterson, <i>Elnek</i> ,	Brockton, Mass.
	102 Laureston St.
Ellen Thomas Prophet, <i>Chippewa</i> ,	Seneca, Mo.
Caleb Sickles, <i>Oneida</i> ,	Tiffin, Ohio,
Annie George Tahquette, <i>Cherokee</i> ,	Cherokee, N. C.
Kamie Owl Wahneeta, <i>Cherokee</i> ,	Cherokee, N. C.
John Webster, <i>Oneida</i> ,	White Earth, Minn.
Wilson Welch, <i>Cherokee</i> ,	Cherokee, N. C.
Joseph Blackbear, <i>Cheyenne</i> ,	(Deceased.)
Nellie Odell, <i>Puyallup</i> ,	Do.
Frank James, <i>Karw</i> ,	Do.

Class of 1899.

Chauncey Archiquette, <i>Oneida</i> ,	Pawhuska, Okla.
Thomas Denomie, <i>Chippewa</i> ,	Odanah, Wis.
Dollie Wheelock Doxtator, <i>Oneida</i> ,	Green Bay, Wis., R.F.D
Christian Eastman, <i>Sioux</i> ,	Santee, Neb.
Minnie Finley Firetail, <i>Caddo</i> ,	Crow Creek, S. D.
Lydia Gardner Geboe, <i>Cheyenne</i> ,	Ft. Defiance, Ariz.
Joseph Gouge, <i>Chippewa</i> ,	
Stuart Hazlett, <i>Piegan</i> ,	Browning, Mont.
Etta Catolst M. Hill, <i>Cherokee</i> ,	Wahhiyah, N. C.
Nettie Horne Beaver, <i>Klamath</i> ,	Hoopa, Calif.
Bertha Dye Jamison, <i>Seneca</i> ,	Gowanda, N. Y.
Corbett Lawyer, <i>Nez Perce</i> ,	Ft. Lapwai, Idaho.
John Limeaux, <i>Chippewa</i> ,	Superior, Wis.
Jeanette Buckles McDonald, <i>Assini</i> ,	Verdi, Nevada.
Louis McDonald, <i>Ponca</i> ,	White Eagle, Okla.
Jonas Mitchell, <i>Chippewa</i> ,	
Vincent Nataillish, <i>Apache</i> ,	110 E. 54th St.
	New York, N. Y.
Mary Moon Orsen, <i>Alaskan</i> ,	Juneau, Alaska.
Edward Peters, <i>Chippewa</i> ,	1137 East Ave. S. W.
	Grand Rapids, Mich.
Anna Gesis Pierce, <i>Chippewa</i> ,	Irving, N. Y.
Lettie Scott, <i>Seneca</i> ,	Buffalo, N. Y.
	1581 Broadway.
Olive Larch Smith, <i>Cherokee</i> ,	Cherokee, N. C.

Class of 1899—Continued

S. Kendall Paul, <i>Alaskan</i> ,	New York City. 149 Broadway.
Jennie Brown Trentmiller, <i>Sioux</i> ,	Drady, N. D.
Sarah Williams Wauskakamick, <i>Chippewa</i> ,	Keshena, Wis.
George Wolfe, <i>Cherokee</i> ,	Cherokee, N. C.
Cora Wheeler, <i>Seneca</i> ,	(Deceased.)
Clara Price, <i>Sioux</i> ,	Do.
George Hazlett, <i>Piegan</i> ,	Do.
Dahney George, <i>Cherokee</i> ,	Do.
Seichu Atsye, <i>Pueblo</i> ,	Do.
Rose Duverney Tolley, <i>Ottawa</i> ,	Do.
Robert Emmett, <i>Crow</i> ,	Do.

Class of 1900.

David Abraham, <i>Chippewa</i> ,	Shawnee, Okla.
John Allen, <i>Clallam</i> ,	Port Williams, Wash.
Kittie Silverheels Armstrong, <i>Seneca</i> ,	Irving, N. Y.
Pasquala Anderson Armijo, <i>Mission</i> ,	Oraibi, Ariz.
Fannie Harris Banister, <i>Sac & Fox</i> ,	
Frank Beale, <i>Clallam</i> ,	Ft. Guichon, B. C.
Constance Lane Bumstead, <i>Lummi</i> ,	Tulalip, Wash.
Charles Corson, <i>Piegan</i> ,	Choteau, Mont.
Alice McCarthy Cram, <i>Chippewa</i> ,	Minneapolis, Minn.
Jacob Horne, <i>Klamath</i> ,	Hoopa, Calif.
Guy Jones, <i>Sioux</i> ,	Standing Rock, N. D.
Amelia Clarke Kaney, <i>Cheyenne</i> ,	Ft. Belknap, Mont.
Rose Poodyry Parker, <i>Seneca</i> ,	Irving, N. Y. R.F.D.
John Lufkins, <i>Chippewa</i> ,	Ponsford, Minn.
Mary Barada Martin, <i>Omaha</i> ,	Bancroft, Nebr.
Artie Miller, <i>Stockbridge</i> ,	Gresham, Wis.
Wesson Murdock, <i>Assiniboine</i> ,	Frazer, Mont.
Sarah Kennedy Oliver, <i>Seneca</i> ,	Buffalo, N. Y.
	257 N. Division St.
Nettie Pierce Parker, <i>Seneca</i> ,	Irving, N. Y.
Charles Roberts, <i>Chippewa</i> ,	Chicago, Ill.
	114 N. May St.
Joseph Scholder, <i>Mission</i> ,	Riverside, Calif., I. T. S.
Isaac Seneca, <i>Seneca</i> ,	Chilocco, Okla., I. T. S.
Mamie Ryan Shade, <i>Assiniboine</i> ,	Ft. Belknap, Mont.
Daisy Doctor Snyder, <i>Seneca</i> ,	Basom, N. Y.
John Teeple, <i>Chippewa</i> ,	Assinina, Mich.
Frank Teeple, <i>Chippewa</i> ,	Skaneec, Mich.
Eliza Smith Thompson, <i>Clallam</i> ,	Hadlock, Wash.
John B. Warren, <i>Chippewa</i> ,	White Earth, Minn.
George Welch, <i>Stockbridge</i> ,	Green Bay, Wis.
Jennie Turkey White, <i>Seneca</i> ,	Fredonia, N. Y.
Lillian Ferris Wilder, <i>Klamath</i> ,	Weitchpec, Cal.

Class of 1900—Continued.

Susie Yupe Green, <i>Shoshoni</i> ,	Fort Hall, Idaho.
Bertha Pierce, <i>Seneca</i> ,	(Deceased.)
George Muscoe, <i>Chippewa</i> ,	Do.
Abram Isaacs, <i>Chippewa</i> ,	Do.
Nancy O. Cornelius, <i>Oneida</i> ,	Do.
Mary Wolfe Farwell, <i>Cherokee</i> ,	Do.

Class of 1901.

John Baine, <i>Sioux</i> ,	Aberdeen, S. D.
Alice Powlas Sianz, <i>Oneida</i> ,	Anadarko, Okla.
Frank Beaver, <i>Winnebago</i> ,	Winnebago, Neb.
Samuel J. Brown, <i>Sioux</i> ,	Brown Valley, Minn.
Anna Goyituey Canfield, <i>Pueblo</i> ,	Paraje Day Sch'L, Casa Blanca, N. M.
Henrietta Coates Crouse, <i>Oneida</i> ,	Versailles, N. Y.
Jennie Wasson Coddling, <i>Coos Bay</i> ,	Marshfield, Ore.
George Ferris, <i>Klamath</i> ,	Orleans, Calif.
Alberta Gansworth, <i>Tuscarora</i> ,	Lewiston, N. Y., RFD.
Willard Gansworth, <i>Tuscarora</i> ,	Sanborn, N. Y.
Stella Mishler Gorsuch, <i>Chippewa</i> ,	Spooner, Wis.
Luzena Tibbetts Isham, <i>Chippewa</i> ,	Bena, Minn.
James E. Johnson, <i>Stockbridge</i> ,	San Juan, Porto Rico.
Joseph LaChapelle, <i>Chippewa</i> ,	Wabasha, Minn.
Anna Parnell Little, <i>Nez Perce</i> ,	Kamiah, Idaho.
Donald McIntosh, <i>Apache</i> ,	St Carlos, Ariz.
Edwin Moore, <i>Sac & Fox</i> ,	Pawhuska, Okla.
Augusta Nash, <i>Winnebago</i> ,	White Rocks, Utah.
Mattie Parker Nephew, <i>Cayuga</i> ,	North Collins, N. Y.
Herman Niles, <i>Stockbridge</i> ,	Chilton, Wis., R. F. D.
Simon Palmer, <i>Stockbridge</i> ,	Keshena, Wis.
Pearl La Chapelle Peterson, <i>Sioux</i> ,	Wabasha, Minn.
John Powlas, <i>Oneida</i> ,	Manderson, S. D.
Arthur Pratt, <i>Sioux</i> ,	Crow Creek, S. D.
Edgar Rickard, <i>Tuscarora</i> ,	Lewiston, N. Y., RFD.
Elnora Denny Roller, <i>Seneca</i> ,	South West City, Mo.
Edwin Smith, <i>Clallam</i> ,	Chemawa, Ore.
Alonzo Spieche, <i>Apache</i> ,	Miami, Ariz.
Ida Swallow Merdanian, <i>Sioux</i> ,	Harviell, Mo.
Antonio Tapia, <i>Pueblo</i> ,	Santa Fe, N. M.
Wingate Temple, <i>Klamath</i> ,	
Eugene Warren, <i>Chippewa</i> ,	White Earth, Minn.
Edward G. Willing, <i>Poyallup</i> ,	Boistfort, Wash.
Ella Sturm Volz, <i>Caddo</i> ,	Ft. Cobb, Okla.
Myron Moses, <i>Seneca</i> ,	(Deceased.)
Nellie Peters, <i>Stockbridge</i> ,	Do.
Jesse Palmer, <i>Sioux</i> ,	Do.
Mark Johnson, <i>Sioux</i> ,	Do.
Dollie Johnson, <i>Osage</i> ,	Do.

Class of 1902.

Genus Baird, <i>Oneida</i> ,	Chin Lee, Ariz.
Charles Bender, <i>Chippewa</i> ,	Navaho School.
Elnora Jamison Buckles, <i>Seneca</i> ,	3515 Judson St., Tioga,
Charles Coleman, <i>Mission</i> ,	Philadelphia, Pa.
Melinda Metoxen Cornelius, <i>Oneida</i> ,	Umatilla, Oreg.
Clara Miller Chew, <i>Tuscarora</i> ,	Gallup, N. Mex.
Katie Powlas Cornelius, <i>Oneida</i> ,	Flandreau, S. D., I. T. S.
Charles Cusick, <i>Tuscarora</i> ,	Lewiston, N. Y., RFD.
Katie Creager Day, <i>Pueblo</i> ,	West Depere, Wis., RFD.
Jennie DeRosier, <i>Menominee</i> ,	Cleveland, Ohio,
Theresa Ebert, <i>Chippewa</i> ,	8815 Thompson Ave.
Nelson Hare, <i>Seneca</i> ,	Seama, N. M.
Charlotte Harris Jenkins, <i>Catawba</i> ,	Nathan, Mich.
Lillian St. Cyr Johnston, <i>Winnebago</i> ,	White Earth, Minn.
Letha Seneca Kennedy, <i>Seneca</i> ,	Irving, N. Y.
Thomas Walker Mani, <i>Sioux</i> ,	Cherokee, N. C.
Ida Wheelock Robinson, <i>Oneida</i> ,	Edendale, Calif.
Samuel Miller, <i>Stockbridge</i> ,	Irving, N. Y.
John H. Miller, <i>Chippewa</i> ,	Sisseton, S. D.
Minerva Mitten Williams, <i>Cayuga</i> ,	Cheyenne River, S. D.
Violetta Nash, <i>Winnebago</i> ,	Gresham, Wis.
Eliza Nauwagesic, <i>Chippewa</i> ,	Elk Rapids, Mich.
William Paul, <i>Alaskan</i> ,	Sanborn, N. Y.
George Peake, <i>Chippewa</i> ,	White Rocks, Utah.
William Mt. Pleasant, <i>Tuscarora</i> ,	Mackinac Island, Mich.
Pelagie Nash Loukes, <i>Winnebago</i> ,	San Francisco, California.
Cornelius Petoskey, <i>Chippewa</i> ,	355 Mills Bldg.
Florence Sickles Rickman, <i>Oneida</i> ,	Minneapolis, Minnesota.
Josephine Janese Sears, <i>Sioux</i> ,	12 Grove St.
Arthur Sickles, <i>Oneida</i> ,	Lewiston, N. Y., RFD.
Fred E. Smith, <i>Oneida</i> ,	Crow Agency, Mont.
Fred Tibbetts, <i>Chippewa</i> ,	Petoskey, Mich.
Grace Warren Hull, <i>Chippewa</i> ,	West Depere, Wis.
Louise Rogers Warren, <i>Chippewa</i> ,	Chilocco, Okla., I. T. S.
Lillian Waterman Pierce, <i>Seneca</i> ,	Great Falls, Mont.
Martin Wheelock, <i>Oneida</i> ,	Unknown
Inez King Wheeler, <i>Stockbridge</i> ,	Bena, Minn.
Mary Bruce White, <i>Mohawk</i> ,	White Earth, Minn.
Healy Wolf, <i>Alaskan</i> ,	White Earth, Minn.
Isaac Fielder, <i>Sioux</i> ,	Syracuse, N. Y., R.F.D.
Anna Lewis, <i>Seneca</i> ,	Seymour, Wis.
Thomas Mooney, <i>Assiniboin</i> ,	Gresham, Wis.
	Hogansburg, N. Y.
	St. Louis, Mo.
	3134 Lucas Ave.
	(Deceased.)
	Do.
	Do.

Class of 1903.

Amy Hill Adams, <i>Sioux</i> ,	Ft. Defiance, Ariz.
Frank Bishop, <i>Seneca</i> ,	Titusville, Pa.
	98 N. Third St.
Samuel Brushel, <i>Stockbridge</i> ,	Gresham, Wis.
Minnie Callsen, <i>Alaskan</i> ,	Unknown, Alaska.
Katie Callsen, <i>Alaskan</i> ,	Unknown, Alaska.
Mabel Greely Campbell, <i>Sioux</i> ,	Morton, Minn.
Clarinda Charles Skye, <i>Seneca</i> ,	(Deceased.)
Elizabeth Knudsen Charles, <i>Klam.</i>	Tomah, Wis., I. T. S.
Martin Costo, <i>Coahuilla</i> ,	U. S. Tennessee.
Oscar Davis, <i>Chippewa</i> ,	Minneapolis, Minn.
	404 Donaldson Bldg.
Lizette Roubideaux Delano, <i>Otoe</i> ,	Washunga, Okla.
Mollie Welch Enders Crow,	Cherokee, N. C.
<i>Cherokee</i> ,	
Celinda King Felm, <i>Oneida</i> ,	Oneida, Wis.
Charlotte Geisdorff, <i>Crow</i> ,	Wahpeton, N. D.
Amos George, <i>Seneca</i> ,	Red House, N. Y.
Thomas Griffin, <i>Okinagon</i> ,	Renton, Wash., RFD.
Minnie Johnson, <i>Seneca</i> ,	Lewiston, N. Y., RFD.
James King, <i>Aviniboin</i> ,	Nashue, Mont.
John Londrosh, <i>Winnebago</i> ,	Breckenridge, N. D.
Susie Rayos Marmon, <i>Pueblo</i> ,	Laguna, N. M.
Sophia American Horse Morisette,	Kyle, S. D.
<i>Sioux</i> ,	
John M. Miller, <i>Stockbridge</i> ,	Sparta, Mich.
Ida Griffin Nori, <i>Okinagon</i> ,	Branford, Conn.
Bessie Peters, <i>Stockbridge</i> ,	Shawnee, Okla., I. T. S.
Maud Snyder Pierce, <i>Seneca</i> ,	Irving, N. Y.
Amy Dolphus Pearman, <i>Sioux</i> ,	Isabel, S. D.
Earney Wilber Philips, <i>Menominee</i> ,	Aberdeen, Wash.
George Pradt, <i>Pueblo</i> ,	Grants, N. M.
Philip Rabbitt, <i>Arapaho</i> ,	Canton, Okla.
Joseph Ruiz, <i>Pueblo</i> ,	Las Cruces, N. M.
Emma G. Skye Jordan, <i>Sioux</i> ,	Wood, S. D.
Sarah Corbin Stilwell, <i>Cherokee</i> ,	Hillside, Okla.
Eugene Tibbetts, <i>Chippewa</i> ,	Euclid, Minn.
Lillian Cornelius Tibbetts, <i>Oneida</i> ,	Bena, Minn.
Sophia Warren Umbriet, <i>Chippewa</i> ,	Tower, Minn.
Nannie Sturm Vannier, <i>Caddo</i> ,	Ft. Cobb, Okla.
Bertha Jamison Wade, <i>Seneca</i> ,	Youngstown, Ohio.
	54 N. Forest Ave.
William Weshinawatok, <i>Menominee</i> ,	Tacony, Philadelphia. Pa.
	3714 Knorr St.
Lizzie Williams, <i>Tuscarora</i> ,	Lewiston, N. Y.
Elizabeth Williams Woodham, <i>Chip.</i> ,	Flandreau, S. D.
Frank Yarlott, <i>Crow</i> ,	Crow Agency, Mont.
Henry Tatiyopa, <i>Sioux</i> ,	(Deceased.)
John Kimball, <i>Ponca</i> ,	Do.
Joseph Ezhuna, <i>Apache</i> ,	Do.

Class of 1903—Continued

Commodore Duxtator, <i>Oncida</i> ,	(Deceased.)
Alice Duxtator, <i>Oncida</i> ,	Do.
Lillian Brown, <i>Sioux</i> ,	Do.

Class of 1904.

George Balenti, <i>Cheyenne</i> ,	Calumet, Okla.
Asenoth Bishop Pierce, <i>Seneca</i> ,	Elko, N. Y.
Lavina Woodworth Bowen, <i>Skokomish</i> .	Portland, Ore.
Fred Brushel, <i>Stockbridge</i> ,	Oshkosh, Wis.
	356 Broad St.
Rose Laforge Dillon, <i>Crow</i> ,	Wyola, Mont.
Truman Duxtator, <i>Oncida</i> ,	Tomah, Wis.
Josie Ramone Enis, <i>Papago</i> ,	Mesa City, Arizona.
Oliver Exendine, <i>Delaware</i> ,	Anadarko, Okla.
Caroline Helms, <i>Mission</i> ,	Unknown.
Martha Hill Swamp, <i>Oncida</i> ,	Green Bay, Wis.
George Hogan, <i>Crow</i> ,	Crow Agency, Mont.
Victor Johnson, <i>Dalles</i> ,	Tacoma, Wash.
William Jollie, <i>Chippewa</i> ,	Belcourt, N. D.
Frances Halthorn Kenjockety, <i>Sen.</i> ,	Irving, N. Y.
Antonio Lubo, <i>Mission</i> ,	Syracuse, N. Y. c/o Art Northrup.
William Mahone, <i>Makah</i> ,	Doty, Wash.
Frank Mt. Pleasant, <i>Tuscarora</i> ,	Lewiston, N. Y.
Nellie Lillard Martin, <i>Piegan</i> ,	El Paso, Texas,
	404 Texas St.
Henry Markishtum, <i>Makah</i> ,	Bonner's Ferry, Idaho.
Walter Mathews, <i>Osage</i> ,	Foraker, Okla.
Salem Moses, <i>Seneca</i> ,	Roanoke, Va.
Rose Nelson Van Wie, <i>Mission</i> ,	Branford, Conn.
Jeanette Pocatello Hardy, <i>Shoshoni</i> ,	Ross Fork, Idaho.
Lydia Wheelock Powlas, <i>Oncida</i> ,	West De Pere, Wis.
Ella Petoskey, <i>Chippewa</i> ,	Grand Rapids, Mich.
	826 Fairmount Ave.
Anna Parker Matthews, <i>Bannock</i> ,	Foraker, Okla.
Mary Pradt Abeita, <i>Pueblo</i> ,	Isleta, N. M.
Henry Rowldges, <i>Arapaho</i> ,	Geary, Okla.
Ayche Saracino, <i>Pueblo</i> ,	Isleta, N. M.
Minnie Nick Sauve, <i>Cherokee</i> ,	Steelton, Pa.
Arthur Sheldon, <i>Nez Perce</i> ,	Toledo, Ohio.
Juna Standingdeer, <i>Cherokee</i> ,	Milwaukee, Wis.
	285 5th St.
Alfred M. Venne, <i>Chippewa</i> ,	Lawrence, Kans.
Lizzie Wirth Smith, <i>Assiniboin</i> ,	Poplar, Mont.
Charles Williams, <i>Stockbridge</i> ,	Ilo, Idaho.
Zoraida Valdezate, <i>Porto Rican</i> ,	San Juan, P. R.
Priscilla Williams, <i>Stockbridge</i> ,	(Deceased.)
Abram Smith, <i>Oncida</i> ,	Do.

Class of 1904—Continued.

Gertrude Jackson Juan, <i>Pima</i> ,	(Deceased.)
Daniel Enos, <i>Pima</i> ,	Do.
Daniel Eagle, <i>Sioux</i> ,	Do.
Tiffany Bender, <i>Washoe</i> ,	Do.

Class of 1905.

Margaret Wilson Abrahams, <i>Shaw.</i> ,	Shawnee, Okla.
Joseph Baker, <i>Winnebago</i> ,	Emerson, Nebr.
Ida Bruce, <i>Mohawk</i> ,	Hogansburg, N. Y.
Wilson Charles, <i>Oneida</i> ,	Tomah, Wis. I. T. S.
Jesse Davis, <i>Nez Perce</i> ,	Webb, Idaho.
Anna B. George, <i>Cherokee</i> ,	5234 Harlan St., Phila, Pa.
Mary George, <i>Seneca</i> ,	Rice, Ariz.
Rose Temple Gilbert, <i>Klamath</i> ,	
Mary Kadashan Hall, <i>Alaskan</i> ,	1022 York St., Vallejo, Cal.
Alice Heater, <i>Digger</i> ,	1365 Ellis St., San Francisco, Cal.
Cornelia Cornelius House, <i>Oneida</i> ,	West De Pere, Wis.
Adelia Janese, <i>Sioux</i> ,	Grosse, S. D.
Lillian Johnson, <i>Seneca</i> ,	55 Clark St., Warren, Pa.
Albert Jacquez, <i>Pueblo</i> ,	Blanco, N. M.
Florence Welch Johnson, <i>Stockbridge</i> ,	San Juan, Porto Rico.
Stella Laughlin, <i>Shawnee</i> ,	Wind River, Wyo.
Delfina Jacques Martinez, <i>Pueblo</i> ,	Blanco, N. M.
Della Magee Miguel, <i>Mission</i> ,	Pala, Cal.
Hattie Miller, <i>Chippewa</i> ,	Ft. Yates, N. D.
Patrick Miguel, <i>Yuma</i> ,	Yuma, Ariz.
Lucy M. Johnson, <i>Chippewa</i> ,	St., Ignace, Mich.
Tossie Nick, <i>Cherokee</i> ,	12th Inftry Band, Monterey, Cal.
Jose Osuna, <i>Porto Rican</i> ,	72 Brown Hall, Princeton, N. J.
Emiliano Padin, <i>Porto Rican</i> ,	Quebradillas, P. R.
Nicholas Pena, <i>Copah</i> ,	Pala, Cal.
Bernice Pierce, <i>Seneca</i> ,	459 Franklin St., Buffalo, N. Y.
Manuel Rexach, <i>Porto Rican</i> ,	San Juan, P. R.
Rebecca Knudsen Rhodd, <i>Ponca</i> ,	Sacred Heart, Okla.
Angela Rivera, <i>Porto Rican</i> ,	Ponce, P. R.
Antonio Rodriguez, <i>Porto Rican</i> ,	San Juan, P. R.
Maria Santaella, <i>Porto Rican</i> ,	Coamo, P. R.
Lillian A. Schanandore, <i>Oneida</i> ,	West Depere, Wis.
Dora Reinkin Shongo, <i>Alaskan</i> ,	
Roxana Smith, <i>Cherokee</i> ,	Otoe, Okla.
Ambrose Stone, <i>Chippewa</i> ,	Honor, Mich.
Polly Tutikoff, <i>Alaskan</i> ,	
Sara Williams Venne, <i>Chippewa</i> ,	Lawrence, Kan.
Stella Blythe Washington, <i>Cherokee</i> ,	Cherokee, N. C.

Class of 1905—Continued.

Levi Webster, <i>Oneida</i> ,	West DePere, Wis.
Bettie Welch Smith, <i>Cherokee</i> ,	Cherokee, N. C.
Edith Bartlett Burns, <i>Bannock</i> ,	Fort Hall, Idaho.
Agnes White Almon, <i>Seneca</i> ,	Durant, Miss.
Spencer Williams, <i>Seneca</i> ,	3807 Poplar St.,
	Phila., Pa.
Manuel Bender, <i>Washoe</i> ,	(Deceased.)
Alice Conners, <i>Iroquois</i> ,	Do.
Martin Machukay, <i>Apache</i> ,	Do.

Class of 1906.

Adeline Kingsley Bear, <i>Winnebago</i> ,	Neopit, Wis.
Emma Logan Bear, <i>Winnebago</i> ,	Winnebago, Nebr.
Bertram Bluesky, <i>Seneca</i> ,	Dartmouth College,
	Hanover, N. H.
Nicholas Bowen, <i>Seneca</i> ,	Onoville, N. Y.
Chauncey Charles, <i>Stockbridge</i> ,	West Depere, Wis.
Elias Charles, <i>Oneida</i> ,	
Christine Childs, <i>Crow</i> ,	Irving, N. Y.
Bertha Dennis, <i>Seneca</i> ,	Carlisle, Pa. I. T. S.
Wallace Denny, <i>Oneida</i> ,	Unalaska, Alaska.
Katharyn Dyakanoff Sellers, <i>Alaskan</i> ,	McAlester, Okla.
Albert Exendine, <i>Delaware</i> ,	355 W. 45th St.,
Clarence Faulkner, <i>Shoshen</i> ,	New York Ci.y.
Ignatius Ironroad, <i>Sioux</i> ,	Cannon Ball, N. D.
Frank Jude, <i>Chippewa</i> ,	Versailles, N. Y.
Rosabel Petterson Pierce, <i>Seneca</i> ,	Apache, Okla.
Wilber Peawo, <i>Comanche</i> ,	Browning, Mont.
Marian Powlas, <i>Oneida</i> ,	Lengby, Minn.
Charles Roy, <i>Chippewa</i> ,	Tonasket, Wash.
Mary Runnels Wickersham, <i>San Poil</i> ,	487 So. Salina St.,
Eudocia Sedick, <i>Alaskan</i> ,	Syracuse, N. Y.
Blanche Lay Seneca, <i>Seneca</i> ,	Irving, N. Y.
William Sholder, <i>Mission</i> ,	Mesa Grande, Cal.
Rose McFarland Stevens, <i>Klamath</i> ,	Eureka, Cal.
Louis E. Paul, <i>Alaskan</i> ,	Chemawa, Ore.
Juliette Smith Twoaxe, <i>Oneida</i> ,	Caughnawaga, Can.
Mary Guyamma Bracken,	Wyandotte, Okla.
<i>Wyandotte</i> ,	
Anna Minthorn Wannassy, <i>Ayuse</i> ,	Pendleton, Ore.
Dock Yukkanatache, <i>Apache</i> ,	(Deceased.)
Abram M. Hill, <i>Oneida</i> ,	Do.
Fmma Burrows French, <i>Yuma</i> ,	Do.

Class of 1907.

- Nicodemus Billy, *Seneca*,
 Arthur Doxtator, *Seneca*,
 Isaac R. Gould, *Alaskan*,
 Zoa Hardin Haney, *Pottawatomie*,
 Sarah Isham, *Chippewa*,
 Freeman Johnson, *Seneca*,
 Jonas Jackson, *Cherokee*,
 William S. Jackson, *Alaskan*,
 Archie Libby, *Chippewa*,
 Arthur Mandan, *Mandan*,
 Josefa M. M. Brown, *Pitt River*,
 Dora LaBelle Mitchell, *Sioux*,
 Elizabeth Walker Nelson, *Alaskan*,
 Eli M. Peazzoni, *Digger*,
 Carl Silk, *Gros Ventre*,
 Albert W. Simpson, *Arikaree*,
 Edward Sorrell, *Shoshoni*,
 Arthur Sutton, *Seneca*,
 Hattie Powlas Sweezy, *Oneida*,
 Susie Whitetree, *Wyandotte*,
 Joseph Libby, *Chippewa*,
 Frances Ghangraw, *Wallawalla*,
 Titus White Crow, *Sioux*,
 Akron, N. Y.
 Versailles, N. Y.
 Unga Island, Alaska.
 Shawnee, Okla., RFD.
 Gresham, Wis.
 6 Rano St.,
 Rochester, N. Y.
 (Deceased.)
 Salem, Ore.
 Libby, Minn.
 Elbowoods, N. D.
 Covelo, Cal.
 Wahpeton, N. D.
 Waterbury, Conn.
 Wyebrook, Pa.
 Tyrone, Pa.
 Elbowoods, N. D.
 Inkom, Idaho.
 Conesus Lake, N. Y.
 Colony, Okla.
 68 Warrenton St.,
 Boston, Mass.
 Libby, Minn.
 (Deceased.)
 Do.

Class of 1908.

- Elizabeth Baird, *Oneida*,
 Josephine Charles, *Oneida*,
 Louis F. Chingwa, *Chippewa*,
 Martha Cornsilk Rave, *Cherokee*,
 Morgan Crowsghost, *Gros Ventre*,
 Alice Denomie Shively, *Chippewa*,
 Archie Dundas, *Alaskan*,
 Thomas Eagleman, *Sioux*,
 John B. Farr, *Chippewa*,
 Eugene Geffe, *Alaskan*,
 Fritz Hendricks, *Caddo*,
 Lucy Coulon House, *Oneida*,
 Peter Hauser, *Cheyenne*,
 Charles Huber, *Gros Ventre*,
 Florence D. Hunter Greaves, *Sioux*,
 Flora E. Jones George, *Seneca*,
 Theodore Owl, *Cherokee*,
 Phila., Pa., 6362 Sherwood
 Road, Overbrook.
 Hoopa Valley,
 Cal., I. T. S.
 Petoskey, Mich.
 Winnebago, Nebr.
 Elbowoods, N. D.
 Odanah, Wis.
 Metlakatla, Alaska.
 Crow Creek, S. D.
 1607 Madison Ave.,
 Toledo, Ohio.
 Salem, Ore.
 Gracemont, Okla.
 Oneida, Wis.
 Darlington, Okla.
 Elbowoods, N. D.
 Graham Island, N. D.
 Akron, N. Y.
 Rice, Ariz.

Class of 1908—Continued.

Ferris Paisano, <i>Pueblo</i> ,	Winslow, Ariz.
Claudia McDonald Frachtenberg, <i>Chippewa</i> ,	Chemawa, Ore.
Elizabeth Penny Wilson, <i>Nez Perce</i> ,	Kooskia, Idaho.
Oscar Smith, <i>Oneida</i> ,	West Depere, Wis.
Lottie Styles Hosie, <i>Gros Ventre</i> ,	922 Seneca St.,
Vera Wagner Lawrence, <i>Alaskan</i> ,	Seattle, Wash.
Ira Walker, <i>Sac & Fox</i> ,	Tecumseh, Okla., RFD.
William Winnie, <i>Seneca</i> ,	Waterford, Pa.
Mary E. Wolfe, <i>Cherokee</i> ,	Cherokee, N. C.
Louis Island, <i>Oneida</i> ,	(Deceased.)

Class of 1909.

Michael Balenti, <i>Cheyenne</i> ,	Calumet, Okla.
Cecilia Baronovitch Balenti, <i>Alaskan</i> ,	Calumet, Okla.
Savannah Beck Casebeer, <i>Cherokee</i> ,	Gem, Idaho.
Georgia Bennett Pierce, <i>Seneca</i> ,	Irving, N. Y.
Olga Reinkin Bolshanin, <i>Alaskan</i> ,	Unalaska, Alaska.
Alonzo G. Brown, <i>Mashpee</i> ,	542 N. 13th St.,
Irene Brown, <i>Sioux</i> ,	Phila., Pa.
Robert Davenport, <i>Chippewa</i> ,	Sisseton, S. D.
Martha Day Dailey, <i>Pueblo</i> ,	Cross Village, Mich.
Margaret D. King, <i>Moharuk</i> ,	Seama, N. M.
George Gardner, <i>Chippewa</i> ,	Phoenixville, Pa.
Josephine Gates, <i>Sioux</i> ,	341 First St.,
Charles Hill, <i>Oneida</i> ,	Keshena, Wis.
Elmira J. Sharette, <i>Chippewa</i> ,	McIntosh, S. D.
Orlando Johnson, <i>Sac & Fox</i> ,	Oneida, Wis.
Helen Lane DeKoff, <i>Summie</i> ,	Fort Totten, N. D.
Marie Lewis, <i>Cherokee</i> ,	Beach P. O., Wash.
Samuel McLean, <i>Sioux</i> ,	Sapulpa, Okla.
Charles M. Henderson, <i>Assiniboin</i> ,	Mission, P. O., Wash.
Myrtle Peters, <i>Stockbridge</i> ,	Wolf Point, Mont.
Thomas Saul, <i>Sioux</i> ,	Chemawa, Ore.
Patrick Verney, <i>Alaskan</i> ,	Crow Creek, S. D.
Elizabeth Webster, <i>Oneida</i> ,	Chemawa, Ore.
John White, <i>Moharuk</i> ,	Crow Agency, Mont.
William Weeks, <i>Gros Ventre</i> ,	212 W. 4th St.,
Alonzo Patton, <i>Alaskan</i> ,	Erie, Pa.
	Elbowoods, N. D.
	(Deceased.)

Class of 1910.

Stella Bear, *Arickee*,
 Stacey Beck Hardy, *Cherokee*,
 John Bastian, *Puyallup*,
 Inez Brown, *Sioux*,
 Johnson Enos, *Pima*,
 Louis George, *Klamath*,

Adeline Greenbrier Shawndosa,
Menominee,
 Carlisle G. Charles, *Menominee*,

Levi Hillman, *Onondago*,
 Raymond Hitchcock, *Klamath*,
 Sarah Hoxie Perry, *Nomelaki*,
 Louise Kenney Holstien, *Klamath*,
 Joseph Loudbear, *Sioux*,
 William Nelson, *Pima*,

Mary Redthunder, *Sioux*,

Selina Twoguns, *Seneca*,
 Fannie Keokuk Foote, *Sac & Fox*,
 Katie Wolfe, *Cherokee*,
 Evelyn Pierce, *Seneca*,
 Margaret B. Burd, *Chippewa*,

Bismarck, N. D.
 Rehobath, N. M.
 Taholah, Wash.
 Ft. Totten, N. D.
 Blackwater, Ariz.
 711 Third St.,
 Eureka, Cal.
 Yankton, S. D.

2904 E. 117th St.,
 Cleveland, O.
 Syracuse, N. Y., RFD. 5
 Riverside, Cal.
 Round Valley, Cal.
 Hershey, Pa.
 Bullhead, S. D.
 117 1/2 First St.,
 Los Angeles, Cal.
 Indian School,
 Dulce, N. M.
 Gowanda, N. Y.
 Stroud, Okla.
 Pawhuska, Okla.
 Lawrence, Kan., I. T. S.
 (Deceased.)

Class of 1911.

Mazie Skye Tallchief, *Seneca*,

Estelle W. Ellis, *Sac & Fox*,
 Elizabeth Keshena, *Chippewa*,
 Emma LaVatta Kuch, *Bannock*,
 Minnie White Wheeler, *Mohawk*,
 Ellen Lundquist, *Chippewa*,
 Nan Saunooke, *Cherokee*,
 Edison Mt. Pleasant, *Tuscarora*,
 Louis Dupuis, *Iowa*,
 James Mumblehead, *Cherokee*,
 Louis H. Runnels, *San Poil*,
 Leroy Redeagle, *Quapaw*,
 Spencer Patterson, *Seneca*,
 Jefferson Smith, *Cros Ventre*,
 Moses Friday, *Arapaho*,
 Francis Coleman, *Chippewa*,
 Charles Fish, *Sioux*,
 Alvin W. Kennedy, *Seneca*,

Fred Leicher, *Stockbridge*,

1581 Broadway,
 Buffalo, N. Y.
 Syracuse, N. Y., RFD.
 Pipestone, Minn.
 Ross Fork, Idaho.
 Hogsburg, N. Y.
 Otoe, Okla. I. T. S.
 Cherokee, N. C.
 Lewiston, N. Y., RFD.
 Horton, Kans.
 Pine Ridge, S. D.
 Keller, Wash.
 Baxter Sprs., Kans.
 Gowanda, N. Y.
 Elbowoods, N. D.
 Wind River, Wyo.
 Stockton, Wis.
 Lower, Brule, S. D.
 U. S. Naval Radio Station,
 Cristobal, Canal Zone.
 Gresham, Wis.

Class of 1911—Continued.

Robert Tahamont, <i>Abenaki</i> ,	145 Watson Ave., Newark, N. J.
William J. Owl, <i>Cherokee</i> ,	Cherokee, N. C.
William J. Ettawageshik, <i>Ottawa</i> ,	Harbor Springs, Mich.
Alfred DeGrasse, <i>Mashpee</i> ,	Greason, Pa.

Class of 1912.

Mary J. Greene, <i>Seneca</i> ,	Lewiston, N. Y., R.F.D.
Ella Johnson, <i>Seneca</i> ,	62 Lakeview Park, Rochester, N. Y.
Louise K. Loudbear, <i>Chippewa</i> ,	Bullhead, S. D.
Anna Melton, <i>Cherokee</i> ,	Grove, Okla.
Margaret LaVatta LaSalle, <i>Shoshone</i> ,	Ross Fork, Idaho.
Iva Miller Thorpe, <i>Cherokee</i> ,	New York City, 147 W. 126th St.
Emma Newashe McAllister, <i>Sac & Fox</i> ,	Gross Bldg., Okla. City, Okla.
Ernestine Venne, <i>Chippewa</i> ,	Lawrence, Kans.
Agnes V. Waite, <i>Serrano</i> ,	Banning, Cal.
Percy Mae Wheelock, <i>Oneida</i> ,	Ind. Sch'l, Crow Creek, S. D.
William Bishop, <i>Cayuga</i> ,	Wilmington, Del.
William Fred Cardin, <i>Quapaw</i> ,	Dana Hall, Warren, O.
Caleb W. Carter, <i>Nez Piere</i> ,	Ahashka, Idaho.
Ben D. Cloud, <i>Sioux</i> ,	McLaughlin, S. D.
Sylvester Long Lance, <i>Cheorkee</i> ,	Manlius, N. Y.
James F. Lyon, <i>Onondago</i> ,	St. Johns Military Acad.
Francis Chas. McDonald, <i>Chippewa</i> ,	Syracuse, N.Y., R.F.D. 5
William Henry Vinson, <i>Clallam</i> ,	Colony, Okla.
Gustavus Welch, <i>Chippewa</i>	Majestic Htl., Bangor, Pa.
Joel Wheelock, <i>Oneida</i> ,	Conway, Carlisle, Pa.
Clifford Taylor, <i>Parumee</i> ,	Lebanon Valley College, Annville, Pa. (Deceased.)

Class of 1913.

Francis Eastman <i>Sioux</i> ,	Carlisle, Pa., I. T. S.
Henry Broker, <i>Chippewa</i> ,	Carlisle, Pa., I. T. S.
Montreville Yuda, <i>Oneida</i> ,	Carlisle, Pa.
Fred Sickles, <i>Oneida</i> ,	
Peter Eastman, <i>Sioux</i> ,	Peever, S. D.
Harrison Smith, <i>Oneida</i> ,	Oneida, Wis.
Earle Duxtator, <i>Cayuga</i> ,	New York City.
Cora T. Elm, <i>Oneida</i> ,	Episcopal Hosp., Phila., Pa.
Anna Hauser, <i>Cheyenne</i> ,	Geary, Okla.
Estelle Bradley, <i>Chippewa</i> ,	Sisseton, S. D.

Class of 1913—Continued.

Sadie M. Ingalls, <i>Sac & Fox,</i>	4132 Chester Ave., Phila., Pa.
Sylvia Moon, <i>Stockbridge,</i>	356 N. Broad, Oshkosh, Wis.
William Garlow, <i>Tuscarora,</i>	Model City, N. Y.
Ivy Metoxen, <i>Oneida,</i>	Genoa, Neb., Ind. Sch.
Lida Wheelock, <i>Oneida,</i>	Valentine, Ariz., Ind. Sch.
Leila Waterman, <i>Seneca,</i>	Gowanda, N. Y.

Class of 1914.

Louise Bluesky <i>Chippewa,</i>	420 Main St., Massillon, Ohio.
Harry Bonser <i>Sioux,</i>	Polson, Mont.
Edward Bracklin, <i>Chippewa,</i>	Stone Lake, Wis.
Frederick C. Broker, <i>Chippewa,</i>	Carlisle, Pa., Ind. Sch.
Margaret Chilson, <i>Pottawatomie,</i>	809 W. 18th St. Oklahoma City, Okla.
Frank Holmes, <i>Chippewa,</i>	503 College Park, Valparaiso, Ind.
Peter J. Jordan, <i>Chippewa,</i>	Prairie du Chien, Wis.
Rose E. Lyons, <i>Chippewa,</i>	Onigum, Minn.
Alvis M. Morrin, <i>Chippewa,</i>	Lawrence, Kan. (H. I.)
Simon Needham, <i>Chippewa,</i>	Deer River, Minn.
Florence Renville, <i>Sioux,</i>	Peever, S. D.
Germaine Renville Eastman, <i>Sioux,</i>	Peever, S. D.
Anna J. Roulette, <i>Chippewa,</i>	Fargo, N. D. Business School.
Lillian Simons, <i>Pokanot,</i>	Mashpee, Mass.
Hazel N. Skye, <i>Seneca,</i>	1581 Broadway, Buffalo, N. Y.
Myrtle Thomas, <i>Chippewa,</i>	Tulalip, Wash., Ind. Sch.
Rose L. Whipper, <i>Sioux,</i>	Crow Creek, S. D.
Joseph Jocks, <i>Iroquois,</i>	(Deceased.)

Class of 1915.

Cora Melbourne Battice, <i>Sac & Fox,</i>	Carlisle, Pa.
Margaret Jeanne Brown, <i>Alaskan,</i>	Carlisle, Pa.
Minnie Armstrong Charles, <i>Cayuga,</i>	Basom, N. Y.
Julia Eleanor Frechette, <i>Chippewa,</i>	Carlisle, Pa.
Elizabeth Marie Gilland, <i>Sioux,</i>	Thunder Hawk, S. D.
Naomi Evelyn Greensky, <i>Chippewa,</i>	Mikado, Mich.
Josephine Muriel Holmes, <i>Chippewa,</i>	Odanah, Wis.
Ella Almeda Israel, <i>Cherokee,</i>	Carlisle, Pa.
Della Irene John, <i>Seneca,</i>	Carlisle, Pa.
Mary Wonita Kewaygeshik, <i>Ottawa,</i>	Goodhart, Mich.
Nettie Mary Klingsley, <i>Winnebago,</i>	Carlisle, Pa.

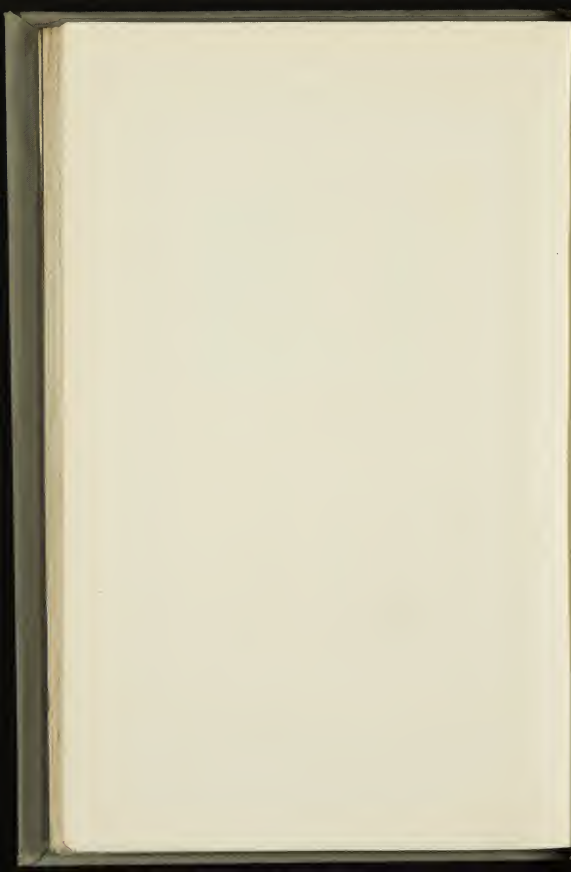
Class of 1915—Continued.

Theresa Marguerite Lay, <i>Seneca</i> ,	Irving, N. Y.
Marie Mason, <i>Digger</i> ,	Wyehrooke, Pa.
Minnie Elizabeth O'Neal, <i>Sboshoni</i> ,	Carlisle, Pa.
Mary Madeline Raiche, <i>Chippewa</i> ,	Carlisle, Pa.
Rose Snow, <i>Seneca</i> ,	Farnham, N. Y.
Lillian Agnes Walker, <i>Ottawa</i> ,	Mt. Pleasant, Mich.
Charles Emerson Apekaum, <i>Kiorwa</i> ,	Lawton, Okla.
Ovilla Azure, <i>Chippewa</i> ,	Belcourt, N. D.
Joseph Paul Baldeagle, <i>Sioux</i> ,	Carlisle, Pa.
Hiram John Chase, <i>Omaha</i> ,	Pender, Neb.
James William Garvie, <i>Sioux</i> ,	Oakdale, Neb.
John Earl Gibson, <i>Pima</i> ,	Mercersburg, Pa.
Henry Horace Hayes, <i>Creek</i> ,	Sapulpa, Okla.
Kenneth Coe King, <i>Sioux</i> ,	Wolf Point, Mont.
Edward Francis Morrin, <i>Chippewa</i> ,	Carlisle, Pa.
Fred William Morrisette, <i>Chippewa</i> ,	Superior, Wis.
Frank Paul, <i>Sioux</i> ,	Rosholt, N. D.
William Joseph Thayer, <i>Chippewa</i> ,	Hayward, Wis.
Michael Wilkie, <i>Chippewa</i> ,	Belcourt, N. D.

CLASS SUMMARY.

(June 25, 1915.)

CLASS.	LIVING.	DEAD.
1889	6	8
1890	12	6
1891	7	3
1892	8	5
1893	6	—
1894	13	6
1895	13	6
1896	22	3
1897	19	7
1898	21	3
1899	26	7
1900	32	5
1901	34	5
1902	39	3
1903	40	7
1904	36	6
1905	43	3
1906	27	3
1907	20	3
1908	26	1
1909	25	1
1910	19	1
1911	23
1912	20	1
1913	16	—
1914	17	1
1915	30
27	600	94



Our Indian Wards



HERE are approximately 300,000 Indians in the United States. They own 69,899,570 acres of land. They have nearly \$50,000,000 of trust funds in the United States Treasury. Their wealth in the aggregate is estimated at one billion dollars.

There are in the United States 84,229 Indian children of school age. Of these 6,428 are ineligible to enrollment in schools, largely because of physical condition.

The appropriation for the support and maintenance of Indian schools for the year 1915 was \$4,678,627.

The following number and classes of Indian schools are maintained by the Government:

- 216 Reservation Day Schools.
- 74 Reservation Boarding Schools.
- 37 Non-reservation Boarding Schools.

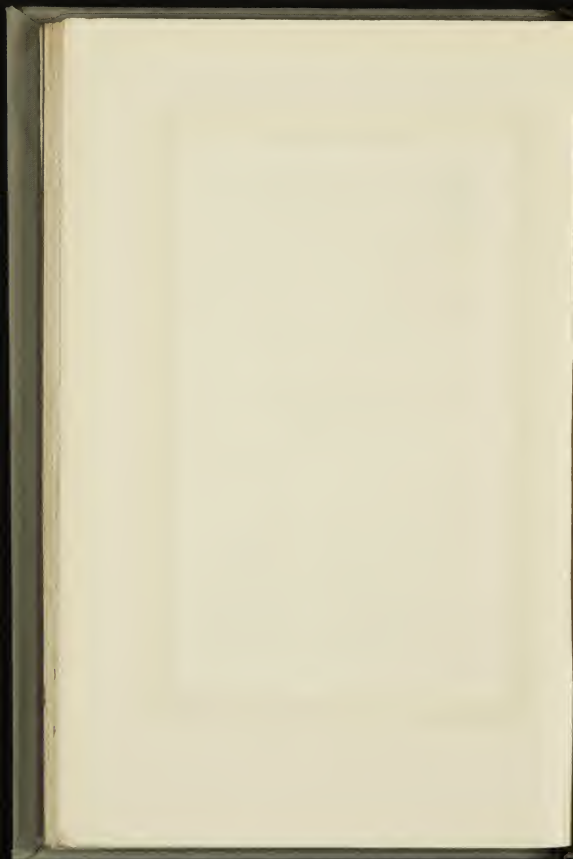
The total value of Indian school property owned by the Government amounts to \$30,927,120.

During the year ended June 30, 1914, Indian children attended schools as follows:

Public Schools.....	25,180
Non-reservation Boarding Schools.....	10,857
Reservation Boarding Schools.....	9,700
Reservation Day Schools.....	7,218
Church Mission and Contract Schools....	5,943

There are about 15,000 eligible Indian children of school age not in any school, largely because sufficient schools are not provided.

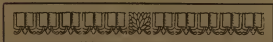
In the United States Indian Service there are nearly 6,000 employes, all of whom are under civil service.





MAN should have a farm or a mechanical craft for his culture. We must have a basis for our higher accomplishments, our delicate entertainments of poetry and philosophy, in the work of our hands. Manual labor is the study of the external world. The advantages of riches remain with him who procured them, not with the heir. I feel some shame before my wood chopper, my ploughman, and my cook, for they have some sort of self-sufficiency; they can contrive without my aid to bring the day and year round, but I depend on them, and have not earned by use a right to my arms and feet.

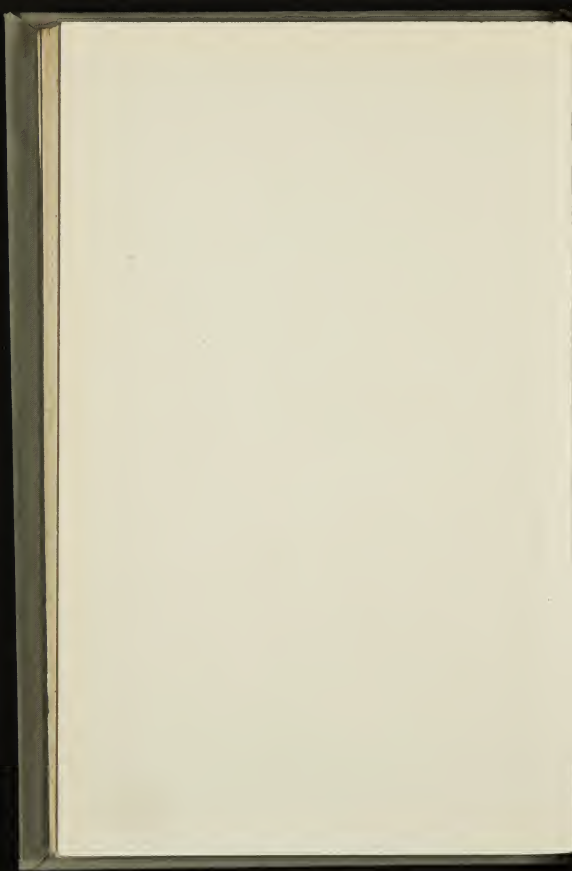
EMERSON





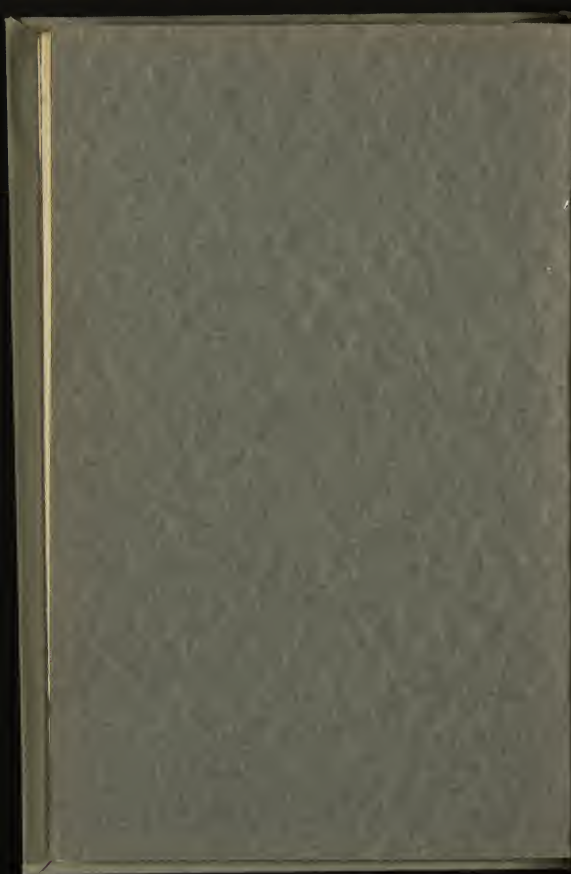
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1915

